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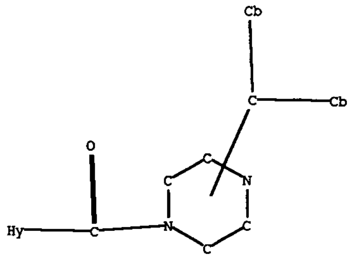

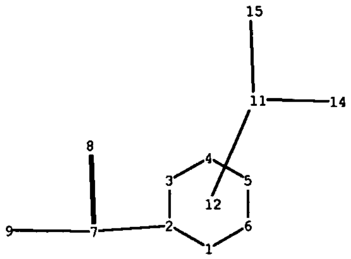

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    7  8  9  11  14  15
ring nodes :
    1  2  3  4  5  6
chain bonds :
    2-7  7-8  7-9  11-14  11-15
ring bonds :
    1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
    1-2  1-6  2-3  2-7  3-4  4-5  5-6  7-8  7-9
exact bonds :
    11-14  11-15
isolated ring systems :
    containing 1 :


Match level :
    1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:Atom
    11:CLASS  12:CLASS  14:Atom  15:Atom
Generic attributes :
    9:
    Type of Ring System     : Monocyclic
    14:
    Saturation              : Unsaturated
    15:
    Saturation              : Unsaturated

Element Count :
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Node 9: Limited
    N,N1

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Documents\Stnexp\Queries\10677631.str
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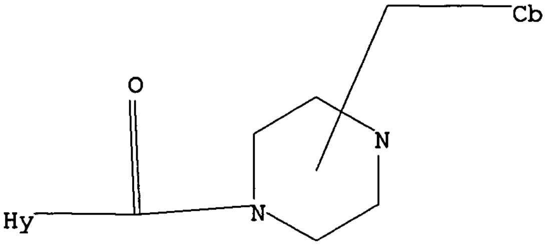

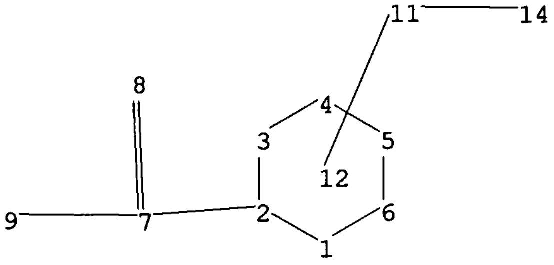

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7  8  9  11  14
ring nodes :
1  2  3  4  5  6
chain bonds :
2-7  7-8  7-9  11-14
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-2  1-6  2-3  2-7  3-4  4-5  5-6  7-8  7-9
exact bonds :
11-14
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:Atom  11:CLASS
12:CLASS  14:Atom
Generic attributes :
9:
Type of Ring System    : Monocyclic
14:
Saturation             : Unsaturated

Element Count :
Node 9: Limited
    N,N1





L1      STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 17:03:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    17127 TO ITERATE

 11.7% PROCESSED     2000 ITERATIONS                           5 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01
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FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       334704 TO   350376
PROJECTED ANSWERS:             464 TO     1248

L2            5 SEA SSS SAM L1

=> d l2 1-4

L2   ANSWER 1 OF 5  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   875674-04-7  REGISTRY
ED   Entered STN:  02 Mar 2006
CN   Benzamide, 3,4-dichloro-N-[4-[4-[4-[[4-(phenylmethyl)-1-
     piperazinyl]carbonyl]-1-piperidinyl]phenoxy]phenyl]- (9CI)  (CA INDEX
     NAME)
FS   3D CONCORD
MF   C36 H36 Cl2 N4 O3
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
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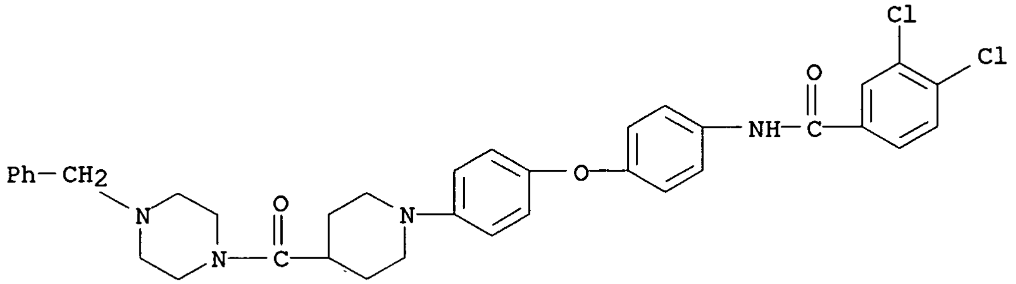

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2   ANSWER 2 OF 5  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   858330-34-4  REGISTRY
ED   Entered STN:  04 Aug 2005
CN   Piperazine, 1-(3-chlorobenzoyl)-4-[[1-(2-fluorophenyl)-5-(4-methoxyphenyl)-
     2-methyl-1H-pyrrol-3-yl]carbonyl]- (9CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C30 H27 Cl F N3 O3
SR   Chemical Library
       Supplier: ComGenex International Inc.
LC   STN Files:   CHEMCATS
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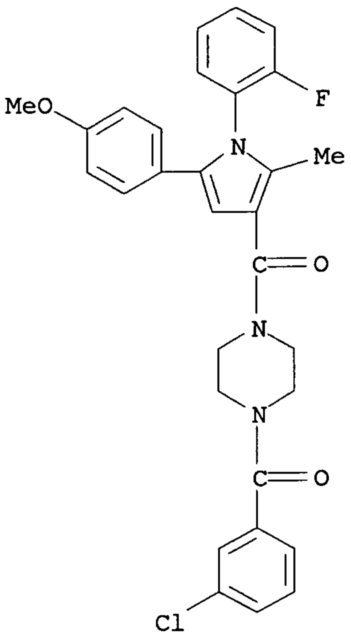
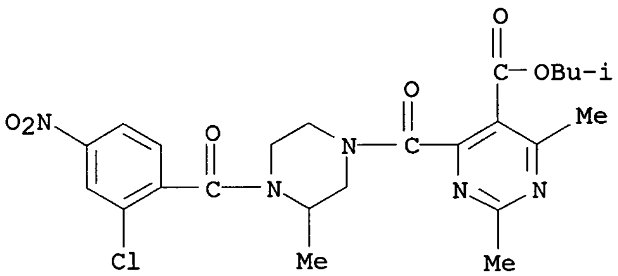


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN 857872-45-8 REGISTRY
ED Entered STN: 01 Aug 2005
CN 5-Pyrimidinecarboxylic acid, 4-[[4-(2-chloro-4-nitrobenzoyl)-3-methyl-1-piperazinyl]carbonyl]-2,6-dimethyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H28 Cl N5 O6
SR Chemical Library
Supplier: ComGenex International Inc.
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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RN   844449-50-9  REGISTRY
ED   Entered STN:  08 Mar 2005
CN   Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(1,6-dihydro-6-oxo-3-
     pyridazinyl)carbonyl]- (9CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C22 H21 Cl N4 O2
SR   Chemical Library
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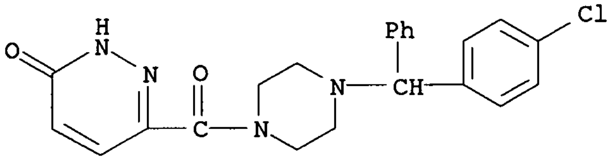

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


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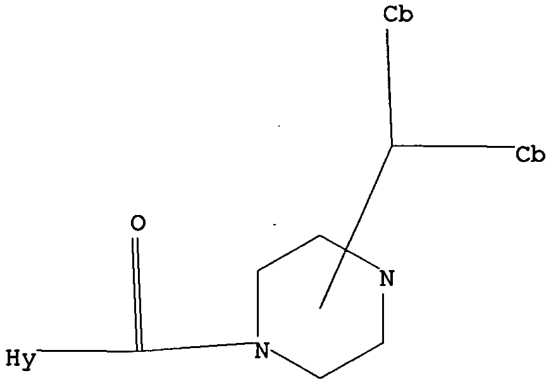

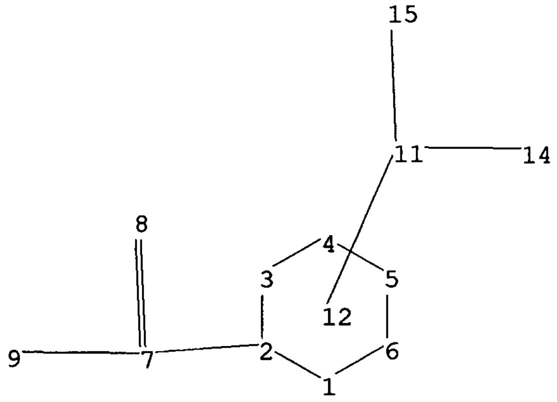

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chain nodes :
7  8  9  11  14  15
ring nodes :
1  2  3  4  5  6
chain bonds :
2-7  7-8  7-9  11-14  11-15
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-2  1-6  2-3  2-7  3-4  4-5  5-6  7-8  7-9
exact bonds :
11-14  11-15
isolated ring systems :
containing 1 :
```

```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:Atom  11:CLASS
12:CLASS  14:Atom  15:Atom
Generic attributes :
9:
Type of Ring System    : Monocyclic
14:
Saturation             : Unsaturated
15:
Saturation             : Unsaturated

Element Count :
Node 9: Limited
    N,N1





L3      STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 17:06:12 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    17127 TO ITERATE

 11.7% PROCESSED     2000 ITERATIONS                               1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       334704 TO   350376
PROJECTED ANSWERS:               1 TO      346

L4            1 SEA SSS SAM L3

=> s l3 sss full
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FULL SCREEN SEARCH COMPLETED -   342692 TO ITERATE

100.0% PROCESSED   342692 ITERATIONS                             433 ANSWERS
SEARCH TIME: 00.00.06

L5          433 SEA SSS FUL L3

=> save l5
ENTER NAME OR (END):ten677631/a
ANSWER SET L5 HAS BEEN SAVED AS 'TEN677631/A'

=> file caplus
COST IN U.S. DOLLARS                                 SINCE FILE     TOTAL
                                                          ENTRY   SESSION
FULL ESTIMATED COST                                      176.74    176.95

FILE 'CAPLUS' ENTERED AT 17:06:52 ON 15 JUN 2006
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FILE LAST UPDATED: 14 Jun 2006  (20060614/ED)

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=> s l5
L6          37 L5

=> d l6 1-37 bib abs fhitstr

L6   ANSWER 1 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2006:293220  CAPLUS
DN   144:350663
TI   Thiazoles, oxazoles, imidazoles, and pyrroles as NF-.kappa.B inhibitors,
     their preparation, pharmaceutical compositions, and use in therapy
IN   Leban, Johann; Schmitt, Harald; Wolf, Kristina; Pegoraro, Stefano; Wuzik,
     Andreas
PA   4 Sc AG, Germany
SO   U.S. Pat. Appl. Publ., 37 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND    DATE        APPLICATION NO.         DATE
     ---------------     ----    --------    --------------------    --------
PI   US 2006069102        A1     20060330    US 2005-192009          20050729
PRAI US 2004-612794P      P      20040927
GI

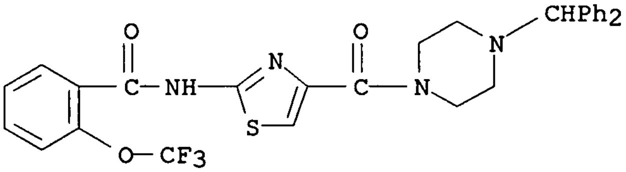



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

AB   The invention relates to 5-membered nitrogen heterocycles of the general
     formula I or II, which are inhibitors of nuclear factor-.kappa.B
     (NF-.kappa.B) activity.  In compds. I, R1 is H, alkyl, cycloalkyl,
     hydroxyalkyl, haloalkyl, haloalkoxy, (un)substituted aryl, (un)substituted
     heteroaryl, or (un)substituted arylalkyl; R2 is selected from
     disubstituted amino, optionally 4-substituted piperidin-1-yl, and
     optionally 4-substituted piperazin-1-yl; X is C(O) or S(O)2; p is 0 or 1;
     and q is 0 or 1.  In compds. II, A is C(O) or S(O)2; n is 0 or 1; Y is S,
```

O, (un)substituted N, or (un)substituted C; Z is N or (un)substituted C; R3 is acyl, carbamoyl, alkoxycarbonyl, acylalkylene, thioacyl; R4 is H, alkyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, alkylamino, cycloalkyl, heterocyclyl, heteroaryl, alkylaryl, or aryl, or R1 and R2, together with Z, form a 3- to 8-membered ring contg. at least one heteroatom selected from N, O, and S; R5 is H, halo, carbamoyl, alkyl, haloalkyl, aryl, or heteroaryl; and R6 is (un)substituted amino, morpholin-4-yl, optionally 4-substituted piperidin-1-yl, or optionally 4-substituted piperazin-1-yl. The invention also relates to the prepn. of I and II, pharmaceutical compns. contg. a compd. I or II and a pharmaceutically acceptable carrier or diluent, as well as to the use of the compns. for the treatment of diseases assocd. with hyperproliferation of cells in mammals, particularly hyperproliferation of T-cells. Amidation of N-Boc-piperidine-4-carboxylic acid with O,N-dimethylhydroxylamine followed by redn. to the corresponding aldehyde, cyclocondensation with cysteine Et ester, and oxidn. gave thiazole III, which underwent hydrolysis and amidation with 4-[1-(4-fluorobenzyl)-1H-benzimidazol-2-yl]piperazine, resulting in the formation of thiazole IV. Compd. IV was deprotected and acylated with 2-(trifluoromethoxy)benzoic acid to give thiazolecarboxamide V. The compds. of the invention express IC50 values between 1 and 30 .mu.M in a proteosome inhibition assay and EC50 values between 3 and 40 .mu.M in a T-lymphocyte proliferation assay. Several compds. of the invention, e.g., V, exhibit 90-100% inhibition of NF-.kappa.B-induced inflammation.

IT **881196-28-7P**, N-[4-((4-(Benzhydryl)piperazin-1-yl)carbonyl)thiazol-2-yl]-2-(trifluoromethoxy)benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of thiazoles and other nitrogen heterocycles as NF-.kappa.B inhibitors)
RN 881196-28-7 CAPLUS
CN Benzamide, N-[4-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-2-thiazolyl]-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:271923 CAPLUS
DN 144:312116
TI Preparation of piperidinylthiazolecarboxamides as inhibitors of T-cell proliferation
IN Leban, Johann; Schmitt, Harald; Wolf, Kristina
PA 4SC AG, Germany
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

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PI   EP 1637529           A1    20060322    EP 2004-22363          20040920
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     WO 2006032322        A1    20060330    WO 2005-EP8261         20050729
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI EP 2004-22363        A     20040920
     US 2004-612794P      P     20040927
OS   MARPAT 144:312116
GI
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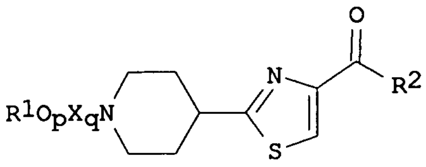


I

AB Title compds. [I; R1 = H, (substituted) alkyl, cycloalkyl, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl, heteroaryl, arylalkyl; R2 = NR3R4, (substituted) piperidinyl, piperazinyl; R3 = (substituted) alkyl, cycloalkyl, alkoxy, alkylamine, OH, SH, alkylthio, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl, heteroaryl; R4 = (substituted) alkyl, cycloalkyl, alkoxy, alkylamine, alkylthio, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl, heteroaryl; p, q = 0, 1; X = CO, SO2], were prepd. Title compds. e.g. [4-(1H-indol-3-yl)piperidin-1-yl][2-[1-(pyrazine-2-carbonyl)piperidin-4-yl]thiazol-4-yl]methanone (general prepn. given) inhibited T-cell lymphocyte proliferation with EC50 = 3-40 .mu.M.

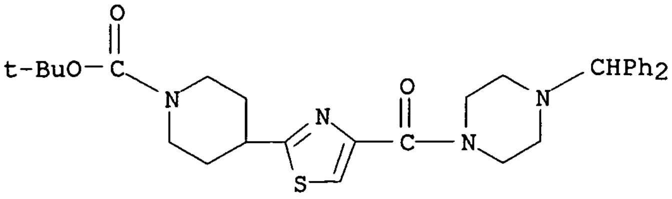
IT **879417-23-9P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidinylthiazolecarboxamides as inhibitors of T-cell proliferation)

RN 879417-23-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[4-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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L6   ANSWER 3 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:1289687  CAPLUS
DN   144:51568
TI   Preparation of substituted 2-quinolyl-oxazoles and their heterocyclic
     analogs useful as pde4 inhibitors
IN   Kuang, Rongze; Blythin, David; Shih, Neng-Yang; Shue, Ho-Jane; Chen, Xiao;
     Cao, Jianhua; Gu, Danlin; Huang, Ying; Schwerdt, John H.; Ting, Pauline
     C.; Wong, Shing-Chun; Xiao, Li
PA   Schering Corporation, USA
SO   PCT Int. Appl., 233 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE      APPLICATION NO.        DATE
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PI   WO 2005116009        A1    20051208  WO 2005-US17134        20050516
     WO 2005116009        B1    20060126
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
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         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     US 2006106062        A1    20060518  US 2005-130359         20050516
PRAI US 2004-572266P      P     20040518
OS   MARPAT 144:51568
GI
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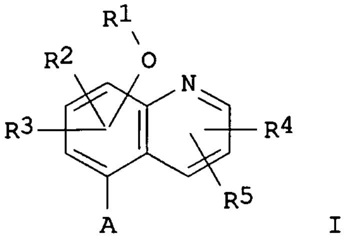
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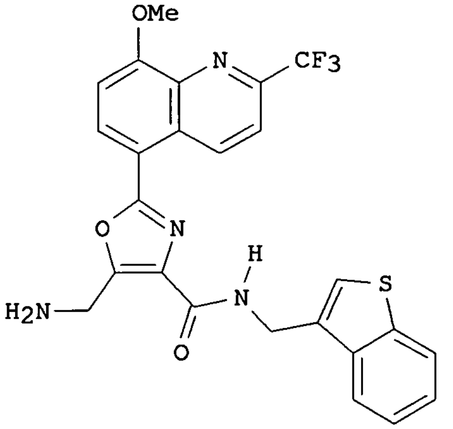

II

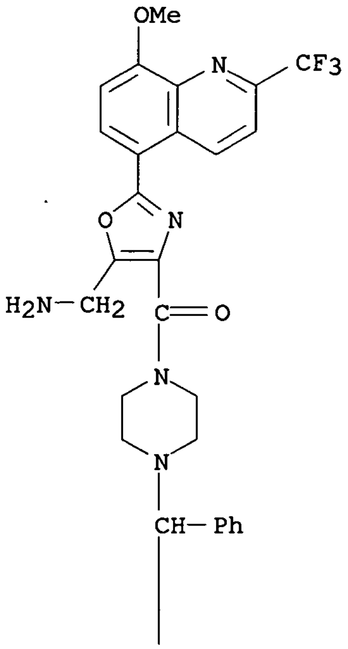
AB Title compds. I [R1 = H, alkyl, cycloalkyl; R2, R3 and R5 independently = H or halo; R4 = H, halo, alkyl, etc.; A = substituted oxazolyl, imidazole, thiazole or pyrrole], and their pharmaceutically acceptable salts, are prepd. and disclosed as pde4 inhibitors. Thus, e.g., II was prepd. in a multistep synthesis from 2-trifluoromethyl-8-methoxyquinolin-5-yl carboxylic acid. In PDE4 assays, selected compds. possessed IC50 values ranging from 0.01-1.8 nM. Also claimed are pharmaceutical compns., the use of the compds. as PDE4 inhibitors, and combinations with other actives.

IT **871001-22-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of substituted quinolyloxazoles and their heterocyclic analogs useful as PDE4 inhibitors)

RN 871001-22-8 CAPLUS

CN Piperazine, 1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-4-[(4-chlorophenyl)phenylmethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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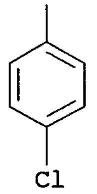

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RE.CNT  6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 4 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:238692  CAPLUS
DN   142:316849
TI   Preparation of phthalazinones as PARP inhibitors
IN   Martin, Niall Morrison Barr; Smith, Graeme Cameron; Jackson, Stephen
     Philip; Loh, Vincent M., Jr.; Cockcroft, Xiao-Ling Fan; Matthews, Ian
     Timothy Williams; Menear, Keith Allan; Kerrigan, Frank; Ashworth, Alan
PA   Kudos Pharmaceuticals Limited, UK; Maybridge Limited
SO   U.S. Pat. Appl. Publ., 67 pp., Cont.-in-part of U.S. Ser. No. 799,154.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE          APPLICATION NO.        DATE
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PI	US 2005059663	A1	20050317	US 2004-876080	20040624
PRAI	GB 2003-5681	A	20030312		
	US 2003-454995P	P	20030314		
	US 2003-493399P	P	20030806		
	US 2003-526244P	P	20031201		
	US 2004-799154	A2	20040312		

OS MARPAT 142:316849

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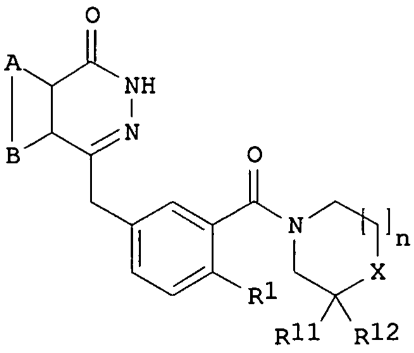

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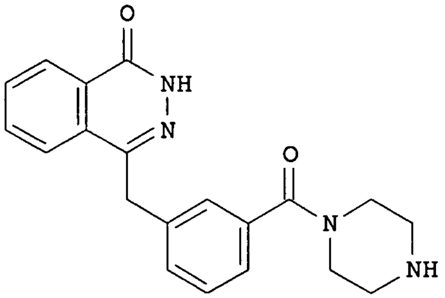


II

AB The title compds. [I; A and B together represent (un)substituted fused arom. ring; X = NRx or CRxRy; if X= NRx then n = 1 or 2 and if X = CRxRy then n = 1; Rx = H, (un)substituted C1-20 alkyl, C5-20 aryl, C3-20 heterocyclyl, amido, thioamido, ester, acyl, and sulfonyl groups; Ry = H, OH, NH2; or Rx and Ry may together form a spiro(C3-7)cycloalkyl or heterocyclyl group; R11 and R12 are both H, or when X = CRxRy, R11, R12, Rx and Ry, together with the carbon atoms to which they are attached, may form (un)substituted fused arom. ring; R1 = H, halo], were prepd. Thus, reacting 3-(4-oxo-3,4-dihydrophthalazin-1-ylmethyl)benzoic acid (prepn. given) with tert-Bu 1-piperazinecarboxylate afforded 77% II which had IC50 of < 0.02 .mu.M against PARP. All compds. I tested had a IC50 of < 0.1 .mu.M in the PARP assay. The pharmaceutical compn. comprising the compd. I is claimed.

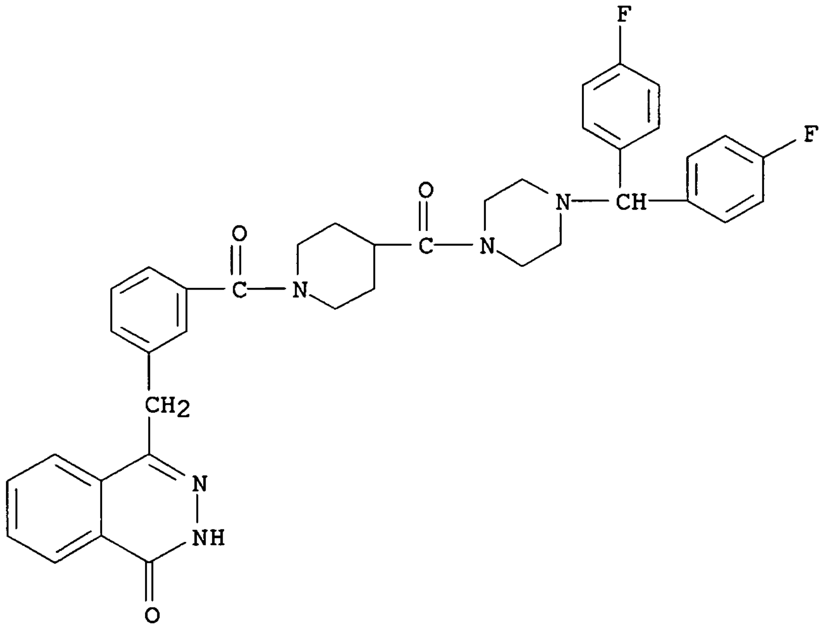
IT **763112-09-0P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phthalazinones as PARP inhibitors for use in the treatment of cancer which is deficient in HR dependent DNA DSB repair pathway)

RN 763112-09-0 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[1-[3-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]benzoyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



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L6   ANSWER 5 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:99177  CAPLUS
DN   142:197868
TI   Preparation of derivatives of 3-hydroxypyrrole-2,4-dicarboxylic acid as
     antitumor agents
IN   Cholody, Wieslaw M.; Petukhova, Valentina; O'Brien, Sean; Ohler, Norman;
     Pikul, Stanislaw
PA   USA
SO   U.S. Pat. Appl. Publ., 46 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   US 2005026991        A1    20050203    US 2003-631887         20030731
     WO 2005011675        A1    20050210    WO 2004-US24473        20040728
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-631887       A     20030731
OS   MARPAT 142:197868
GI
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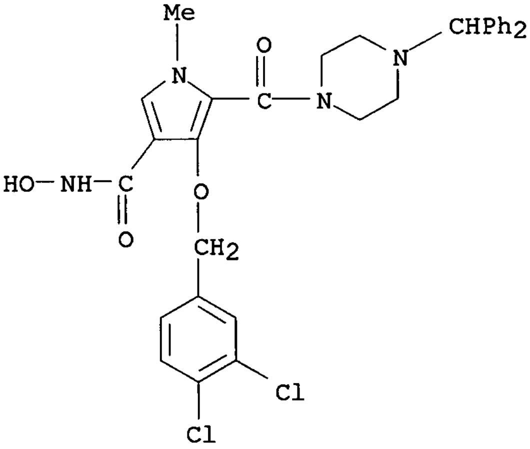
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I or II [R1 = H, alkyl, heteroaryl, aryl, etc.; R2 = H, alkyl, alkenyl, alkynyl, etc.; R3 = alkyl, heteroaryl; R4 = H, alkyl, heteroaryl, aryl, etc.; R3 and R4 can be connected together to form a 4-7 membered heterocycle; R5 = H, alkyl, heteroaryl, etc.; X, Y = alkyl, alkenyl, alkynyl, etc.; a, b, c = 0-1; including pharmaceutically acceptable salts thereof] that modulate levels of gene expression in cellular systems, including cancer cells (no data given), are disclosed, along with methods for prepg. such agents, as well as pharmaceutical compns. contg. such agents as active ingredients and methods of using these as therapeutic agents. E.g., a multi-step synthesis of III.TFA, starting from di-Et 3-hydroxy-1-methyl-1H-pyrrole-2,4-dicarboxylate, was given.

IT **837406-40-3P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of derivs. of 3-hydroxypyrrole-2,4-dicarboxylic acid as antitumor agents)

RN 837406-40-3 CAPLUS

CN 1H-Pyrrole-3-carboxamide, 4-[(3,4-dichlorophenyl)methoxy]-5-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy-1-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:902341 CAPLUS
DN 141:379919
TI Preparation of (iso)thiazole benzenesulfonamides and other heterocycles as inhibitors of fungal invasion
IN Talley, John Jeffrey; Fretzen, Angelika; Zimmerman, Craig; Barden, Timothy.; Yang, Jing Jing; Martinez, Eduardo; Milne, G. Todd; Etchell, A. Cordero; Christine, M. Pierce; Houman, Fariba; Busby, Robert; Summers, Eric F.; Antonelli, Stephen; Lee, Peter; Farwell, Michael; Mayorga, Maria; O'Leary, Jessica

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PA   Microbia., Inc., USA
SO   PCT Int. Appl., 179 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2004092123        A2    20041028   WO 2004-US11187        20040412
     WO 2004092123        A3    20050519
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
PRAI US 2003-461727P      P     20030410
     US 2003-469286P      P     20030509
     US 2003-485678P      P     20030709
OS   MARPAT 141:379919
GI
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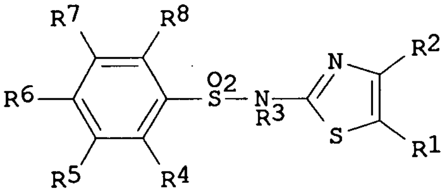

I

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AB   Title compds. e.g. [I; R1 = (substituted) alkyl, alkoxy; R2 = H, halo; R3
     = H, CHO, Ac, (substituted) alkyl; R4 = H, halo, (substituted) alkyl,
     cycloalkyl, alkenyl, alkynyl, alkylamino, Ph, heteroaryl], were prepd.
     Thus, 4-bromo-2-fluoro-N-(5-methylthiazol-2-yl)benzenesulfonamide,
     4-fluorobenzeneboronic acid, Pd(PPh3)4, and K2CO3 were stirred in
     PhMe/Me2CHOH/H2O to give 15% 2,4'-difluoro-N-(5-methylthiazol-2-yl)-1,1'-
     biphenyl-4-sulfonamide.  In a screen for inhibition of Candida albicans
     logarithmic phase growth, title compds. showed IC50's of as low as 0.0005
     .mu.M.
IT   782475-59-6
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (prepn. of (iso)thiazole benzenesulfonamides and other heterocycles as
        inhibitors of fungal invasion)
RN   782475-59-6  CAPLUS
CN   Piperazine, 1-(diphenylmethyl)-4-[[1-(1-oxobutyl)-2-pyrrolidinyl]carbonyl]-
      (9CI)  (CA INDEX NAME)
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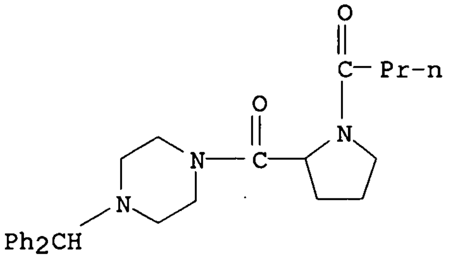

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L6   ANSWER 7 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:780675  CAPLUS
DN   141:296034
TI   Preparation of phthalazinones as PARP inhibitors
IN   Martin, Niall Morrison Barr; Smith, Graeme Cameron Murray; Jackson,
     Stephen Philip; Loh, Vincent M., Jr.; Cockcroft, Xiao-Ling Fan; Matthews,
     Ian Timothy Williams; Menear, Keith Allan; Kerrigan, Frank; Ashworth, Alan
PA   Kudos Pharmaceuticals Limited, UK; Maybridge Limited
SO   PCT Int. Appl., 102 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2004080976        A1    20040923    WO 2004-GB1059          20040312
     WO 2004080976        C1    20060105
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     AU 2004220321        A1    20040923    AU 2004-220321          20040312
     CA 2517629           AA    20040923    CA 2004-2517629         20040312
     GB 2415430           A1    20051228    GB 2005-20754           20040312
     BR 2004008284        A     20060307    BR 2004-8284            20040312
     EP 1633724           A1    20060315    EP 2004-720068          20040312
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     CN 1788000           A     20060614    CN 2004-80012878        20040312
     NO 2005004625        A     20051111    NO 2005-4625            20051007
PRAI GB 2003-5681         A     20030312
     US 2003-454995P      P     20030314
     US 2003-493399P      P     20030806
     US 2003-526244P      P     20031201
     WO 2004-GB1059       A     20040312
OS   MARPAT 141:296034
GI
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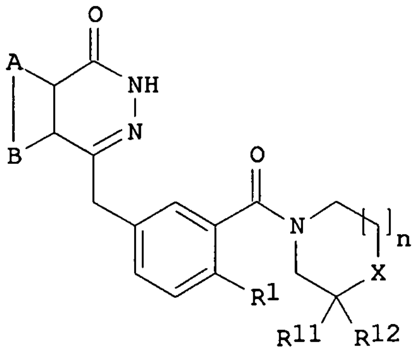

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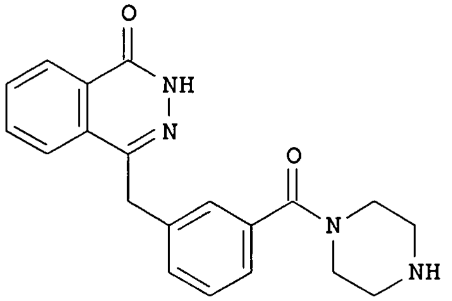


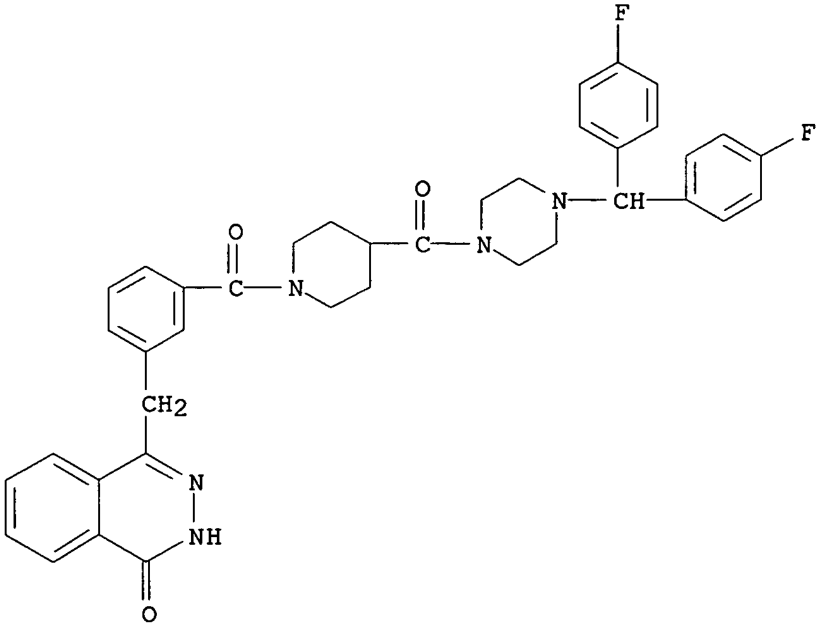
II

AB The title compds. [I; A and B together represent (un)substituted fused arom. ring; X = NRx or CRxRy; if X= NRx then n = 1 or 2 and if X = CRxRy then n = 1; Rx = H, (un)substituted C1-20 alkyl, C5-20 aryl, C3-20 heterocyclyl, amido, thioamido, ester, acyl, and sulfonyl groups; Ry = H, OH, NH2; or Rx and Ry may together form a spiro(C3-7)cycloalkyl or heterocyclyl group; R11 and R12 are both H, or when X = CRxRy, R11, R12, Rx and Ry, together with the carbon atoms to which they are attached, may form (un)substituted fused arom. ring; R1 = H, halo], were prepd. Thus, reacting 3-(4-oxo-3,4-dihydrophthalazin-1-ylmethyl)benzoic acid (prepn. given) with tert-Bu 1-piperazinecarboxylate afforded 77% II which had IC50 of < 0.02 .mu.M against PARP. All compds. I tested had a IC50 of < 0.1 .mu.M in the PARP assay. The pharmaceutical compn. comprising the compd. I is claimed.

IT **763112-09-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phthalazinones as PARP inhibitors)

RN 763112-09-0 CAPLUS

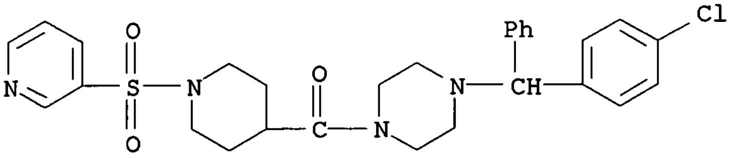
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[1-[3-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]benzoyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



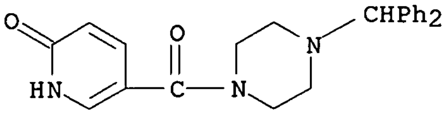
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:742260 CAPLUS
DN 142:273789
TI Synthesis, structure, and properties of a number of 3-sulfanilamidic derivatives of pyridine
AU Solov'ev, M. Yu.; Filimonov, S. I.; Skorenko, A. V.; Ivanenkov, Ya. A.; Balakin, K. B.; Dorogov, M. V.
CS Yaroslav. Gos. Pedagog. Univ. im. K. D. Ushinskogo, Russia
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (2004), 47(2), 28-36
CODEN: IVUKAR; ISSN: 0579-2991
PB Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet
DT Journal
LA Russian
AB 3-Pyridinesulfochloride was synthesized by the dehydroxochloration of 3-pyridinesulfonic acid and used for the synthesis of a no. of primary and secondary sulfonylamides and also (3-pyridinesulfonyl)-pyperidinecarboxylic acids and their amides NMR 1H-spectra of the synthesized compds. are described and interpreted. The rating of their potential suitability for biol. tests is carried out according to Lipinski rules and "lead-like"-conception. Also, the rating of ability of the received compds. to penetrate through the hemato-encephalic barrier was made using the special neuron-net model. The conclusion about the expediency of testing of the synthesized compds. is made for the area of development of CNS acting drugs.
IT **847401-94-9P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., structure, and properties of 3-sulfanilamidic derivs. of pyridine)

RN 847401-94-9 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[[1-(3-pyridinylsulfonyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:511760 CAPLUS
DN 141:420344
TI Neuroprotection of hydroxynicotinyl amide 18 against lipid peroxidation and memory impairment
AU Vajragupta, Opa; Monthakantirat, Orawan; Boonchoong, Preecha; Watanabe, Hiroshi; Peungvicha, Penchom
CS Department of Pharmaceutical Chemistry and Department of Physiology, Faculty of Pharmacy, Mahidol University, Bangkok, 10400, Thailand
SO Warasan Phesatchasat (2002), 29(1-2), 33-43
CODEN: VPSADN; ISSN: 0125-1570
PB Mahidol University, Faculty of Pharmacy
DT Journal
LA English
AB Hydroxynicotinyl amide 18, a novel radical-scavenging agent, was developed for neuroprotection. 18 Showed substantial ex vivo inhibitory action against lipid peroxidn. in mice brain regardless of low in vitro inhibition. These indicated that 18 effectively reached the brain, the target site. ESR verified the scavenging ability of 18 by showing suppression of the HO.cntdot. and O2.cntdot.- radicals resulting in the decrease of signal areas of PBN/OH and DMPO/OOH, resp. Neuropharmacol. of 18 was investigated in mice in comparison with chroman amide 12P, a potent neuroprotective-radical scavenger. 18 At 100 mg/kg, i.p. was the promising compd. as it showed significant suppression (18.16%) on the hypermotility induced by methamphetamine (MAP), but did not reduce locomotor activity in normal condition as 12P did. The suppression demonstrated the enhancement of brain delivery and the antagonism against aberrant dopamine release. In water maze test, 18 (100 mg/kg, i.p.) as well as 12P (200 mg/kg) and tacrine (3 mg/kg), significantly reduced the learning and memory impairment induced by scopolamine (0.5 mg/kg), 18 was more potent than 12P. These results support the enhanced brain delivery of 18 as well as provide addnl. evidence for the role of radical scavenger in the modulation of brain neurotransmitters in the aberrant condition.
IT **794524-22-4P**
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hydroxynicotinyl amide 18 showed substantial ex vivo antilipid peroxidn., but low in vitro inhibition, had radical scavenging activity, suppressed MAP-induced hypermotility and reduced scopolamine-induced cognitive deficits in mouse)
RN 794524-22-4 CAPLUS
CN Piperazine, 1-[(1,6-dihydro-6-oxo-3-pyridinyl)carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



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RE.CNT  39     THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 10 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:308416  CAPLUS
DN   140:339339
TI   Preparation of piperidinylcarbonylpiperazines for treatment of
     neurological diseases
IN   Lauffer, David J.; Botfield, Martyn C.; Eckard, Ottow
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 56 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2004031148        A1    20040415   WO 2003-US31080        20031002
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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     AU 2003299145        A1    20040423   AU 2003-299145         20031002
     US 2004180880        A1    20040916   US 2003-677631         20031002
     EP 1546103           A1    20050629   EP 2003-756899         20031002
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1717390           A     20060104   CN 2003-80104172       20031002
     JP 2006504717        T2    20060209   JP 2004-541991         20031002
     NO 2005002153        A     20050531   NO 2005-2153           20050502
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OS   MARPAT 140:339339
GI
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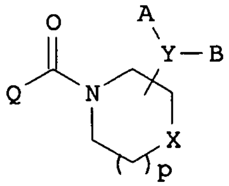


I

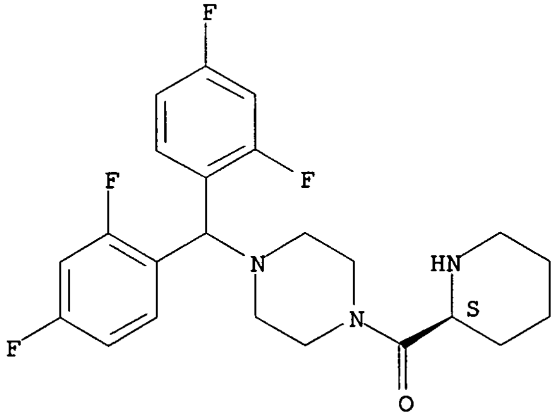
AB Title compds. [I; Q = 3-7 membered (substituted) (unsatd.) N-heterocyclyl; X = C(R2)2, N, NR2, O, S, SO, SO2; Y = bond, O, (O-, S-, SO-, SO2-, CO-, imino-interrupted) alkyl, alkenyl, alkynyl; p = 0-2; A, B = null, H, (substituted) (hetero)aryl; R2 = H, alkyl, alkenyl, alkynyl], were prepd. Thus, pivaloyl chloride was added dropwise to (S)-1-tert-butoxycarbonyl-2-piperidinecarboxylic acid and Et3N in CH2Cl2 over 1 h followed by stirring for 2 h; 1-[bis(3,4-difluorophenyl)methyl]piperazine (prepn. given) in CH2Cl2 was added over 2 h followed by stirring overnight to give 80% 2-[4-[bis(3,4-difluorophenyl)methyl]piperazine-1-carbonyl]piperidine-1-carboxylic acid tert-Bu ester. The latter was treated with CF3CO2H in CH2Cl2 to give [4-[bis(3,4-difluorophenyl)methyl]piperazin-1-yl]piperidin-2-ylmethanone. The latter inhibited NMDA-induced neuroexcitotoxic injury to rat embryo mesencephalic cell suspensions with IC50 = 6 nM.

IT **678969-68-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperidinylcarbonylpiperazines for treatment of neurol. diseases)

RN 678969-68-1 CAPLUS

CN Piperazine, 1-[bis(2,4-difluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:142804 CAPLUS

DN 140:199333

TI Preparation of piperazine and piperidine derivatives for treating or preventing neuronal damage or to stimulate nerve growth

IN Tomlinson, Ronald; Lauffer, David; Mullican, Michael

PA USA

SO U.S. Pat. Appl. Publ., 46 pp.
CODEN: USXXCO

DT Patent

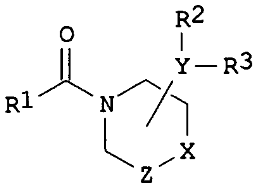
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004034019	A1	20040219	US 2002-214906	20020808
PRAI	US 2002-214906		20020808		

OS MARPAT 140:199333

GI



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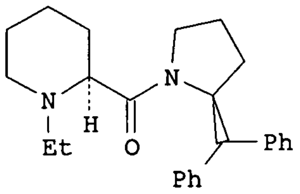


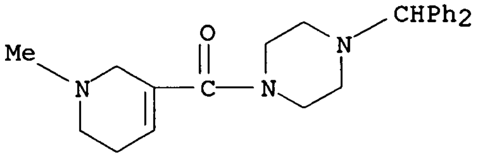
II

AB The authors have prepd. a variety of piperidine and piperazine derivs. I [R1 = (un)satd. monocycle, bicycle, tricycle; R2, R3 = independently H, Ar, none, Ar = (un)substituted Ph, 1-naphthyl, pyrazinyl, indolyl, etc.; X = C(R4)2, N, N(R4), O, S, SO, SO2, R4 = independently H, alkyl, alkenyl, alkynyl; Y = O, alkyl, alkenyl, alkynyl; Z = (CH2)n, n = 0, 1, 2] that are useful for treating or preventing neuronal damage, particularly damage assocd. with neurol. diseases. Thus, the pyrrolidinylpiperidine II was prepd. by reacting 1-ethyl-(2S)-piperidine-2-carboxylic acid with (S)-2-(1,1-diphenylmethyl)pyrrolidine. In a neuroprotection assay, II displayed an EC50(nM) greater than 500. The invention also provides pharmaceutical compns. comprising the compds. and methods of utilizing those compns. for treating or preventing neuronal damage or for stimulating nerve growth.

IT **518051-10-0**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of piperidine and piperazine derivs. and use for treating or preventing neuronal damage or to stimulate nerve growth)

RN 518051-10-0 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(1,2,5,6-tetrahydro-1-methyl-3-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:356258 CAPLUS
DN 138:348723
TI Heterocyclic compounds, and preparation thereof, for modulators of the cholesterol biosynthetic pathway, and therapeutic use
IN Botfield, Martyn; Mcdonald, Fiona; Kraetzschmar, Joern; Lindenthal, Bernhard; Kreft, Bertold
PA Vertex Pharmaceuticals Incorporated, USA

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SO     PCT Int. Appl., 225 pp.
       CODEN: PIXXD2
DT     Patent
LA     English
FAN.CNT 1
       PATENT NO.          KIND    DATE          APPLICATION NO.         DATE
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PI     WO 2003037338        A2     20030508      WO 2002-US35269         20021101
       WO 2003037338        A3     20031127
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               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
               PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
               UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
               KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
               FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
               CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
       US 2003191110        A1     20031009      US 2002-286416          20021101
       EP 1441728           A2     20040804      EP 2002-802524          20021101
           R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
       JP 2005511560        T2     20050428      JP 2003-539682          20021101
PRAI   US 2001-344485P      P      20011101
       WO 2002-US35269      W      20021101
OS     MARPAT 138:348723
AB     The invention discloses methods for modulating the cholesterol
       biosynthetic pathway.  The level of cholesterol in the body is linked to
       numerous pathol. states.  The methods of the invention alter the
       transcription levels of genes involved in the cholesterol biosynthesis.
       The methods of the invention can used for treating diseases mediated by
       the cholesterol biosynthetic pathway.  Prepn. of compds., e.g.
       1-[(S)-2-(1,1-diphenylmethyl)pyrrolidin-1-yl]-1-[(S)-1-ethylpiperidin-2-
       yl]methanone, is included.
IT     354563-61-4P
       RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); RCT
       (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
       (Biological study); CMBI (Combinatorial study); PREP (Preparation); RACT
       (Reactant or reagent); USES (Uses)
          (heterocyclic compd. prepn. for modulator of cholesterol biosynthetic
          pathway, and therapeutic use)
RN     354563-61-4  CAPLUS
CN     Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-
       (9CI)  (CA INDEX NAME)
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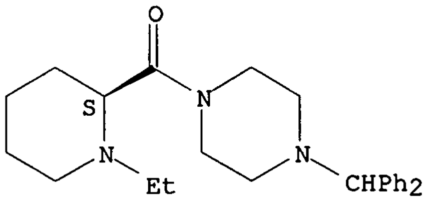
Absolute stereochemistry.



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L6   ANSWER 13 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2002:539670  CAPLUS
DN   137:93746
TI   2-Arylimino-2,3-dihydrothiazoles, processes for their preparation, and
     their use as somatostatin receptor ligands
IN   Moinet, Christophe; Sackur, Carole; Thurieau, Christophe
PA   Societe De Conseils De Recherches Et D'applications Scientifiques
     (S.C.R.A.S.), Fr.
SO   PCT Int. Appl., 465 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2002055510        A1    20020718   WO 2002-FR93           20020111
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     FR 2819508           A1    20020719   FR 2001-396            20010112
     FR 2819508           B1    20050121
     CA 2434203           AA    20020718   CA 2002-2434203        20020111
     EP 1353912           A1    20031022   EP 2002-700318         20020111
     EP 1353912           B1    20050824
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     BR 2002006407        A     20040106   BR 2002-6407           20020111
     JP 2004530643        T2    20041007   JP 2002-556180         20020111
     AT 302765            E     20050915   AT 2002-700318         20020111
     ES 2248514           T3    20060316   ES 2002-2700318        20020111
     NZ 526692            A     20060428   NZ 2002-526692         20020111
     ZA 2003005100        A     20040827   ZA 2003-5100           20030630
     NO 2003003120        A     20030911   NO 2003-3120           20030708
PRAI FR 2001-396          A     20010112
     WO 2002-FR93         W     20020111
OS   MARPAT 137:93746
GI



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

AB   The invention concerns novel 2-arylimino-2,3-dihydrothiazole derivs. I and
     their racemates, enantiomers, combinations, and salts [wherein R1 =
     (un)substituted, particularly amino-substituted alk(en/yn)yl,
     (hetero)aryl, aralkyl, cycloalkyl, etc.; R2 = (un)substituted carbocyclic
     or heterocyclic aryl; R3 = alkyl, adamantyl, (un)substituted (hetero)aryl
     or (hetero)aralkyl, (un)substituted carbamoyl; R4 = H, alkyl,
     (un)substituted (hetero)aralkyl, etc.].  Also disclosed are methods of
     their prepn. and their use as medicines, in particular for treating a wide
     variety of pathol. conditions or diseases involving somatostatin
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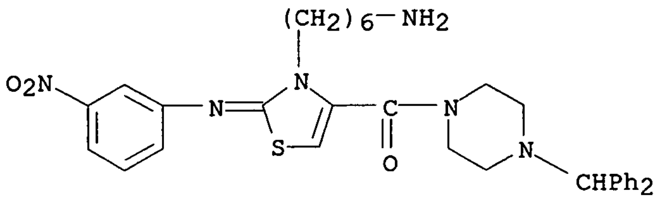
receptors. In particular, these pathol. conditions include acromegaly, pituitary adenoma, endocrine gastroenteropancreatic tumors (including carcinoid syndrome), and gastrointestinal bleeding. Examples include a few detailed syntheses, a listing of over 2800 characterized invention compds., and various precursor prepns. For instance, 4-H2NC6H4CH2CH2NH2 was bound to Wang resin p-nitrophenylcarbonate (at the aliph. amino group), and the resin-bound amine reacted sequentially with PhCH2CH2NCS, bromopyruvic acid, and 4-ClC6H4CH2NH2 to give, after acidic cleavage, (Z)-isomeric title compd. II. Twenty selected compds. I, including III.2HCl, inhibited binding of [125I-Tyr11]SRIF-14 to human somatostatin receptors in vitro with Ki < 200 nM.

IT **322747-62-6P**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of (arylimino)dihydrothiazoles as somatostatin receptor ligands)

RN 322747-62-6 CAPLUS

CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(3-nitrophenyl)imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:314910 CAPLUS
DN 136:340698
TI Preparation of 2-substituted heterocyclic compounds as regulators of cellular transport proteins
IN Degenhardt, Charles Raymond; Eickhoff, David Joseph
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002032868	A2	20020425	WO 2001-US32524	20011016
	WO 2002032868	A3	20020906		
	WO 2002032868	C1	20031113		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,

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             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     US 2002119960          A1     20020829    US 2000-741272          20001219
     US 6809093             B2     20041026
     CA 2420999             AA     20020425    CA 2001-2420999         20011016
     AU 2002024431          A5     20020429    AU 2002-24431           20011016
     EP 1326834             A2     20030716    EP 2001-987745          20011016
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004511545          T2     20040415    JP 2002-536052          20011016
PRAI US 2000-241127P        P      20001017
     US 2000-741272         A      20001219
     WO 2001-US32524        W      20011016
OS   MARPAT 136:340698
GI
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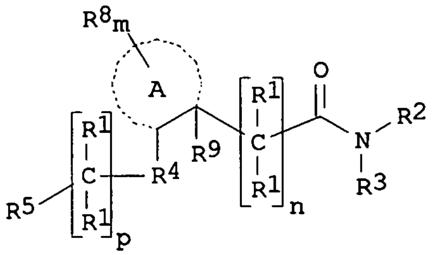


I

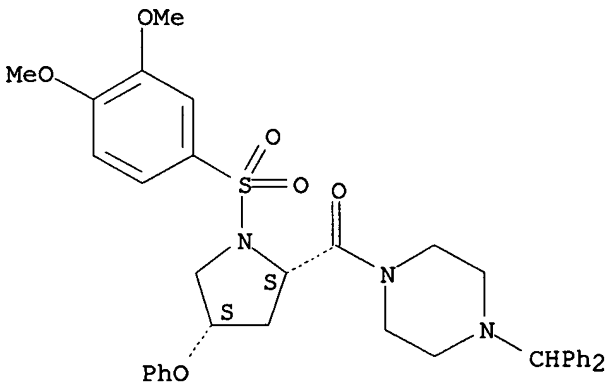
AB The title compds. such as 2-pyrrolidinecarboxamides and 2-piperidinecarboxamides [I; m, p = 0 to .apprx.6; n = 0 to 10; A = substituted heterocyclic group having .apprx.4 to .apprx.9 members; R1 = H, HO, (un)substituted hydrocarbon, heterogeneous, carbocyclic, heterocyclic, arom., or heteroarom. group; R2 and R3 are bonded together to form a substituted heterocyclic group having .apprx.4 to .apprx.9 members, with the proviso that the substituted heterocyclic group optionally contains 1 or more members selected from the group consisting of O, and (un)substituted NH; R4 = SO2, CO, CO-CO, CHR1; R5 = NR6R7 and (O)rR6; wherein r is 0 or 1; R6, R8 = (un)substituted hydrocarbon, heterogeneous, carbocyclic, heterocyclic, arom., or heteroarom. group; R7 = H and R6; R9 = H, hydrocarbon group] are prepd. These compds. regulate the cellular transport proteins P-glycoprotein or MRP1, or both, which are the proteins believed to be largely responsible for causing multidrug resistance in cancer patients and are useful for treating multidrug resistance. Thus, 1-(piperidine-2-carbonyl)piperidine-3-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (prepn. given) (234.4 mg) was dissolved in ethanol (12 mL) at ambient temp., followed by adding (R)-5-oxiranylmethoxyquinoline (100.0 mg), and the resulting mixt. was refluxed for 24.5 h to give 1-[1-[2-(R)-hydroxy-3-(quinolin-5-yloxy)propyl]piperidine-2-carbonyl]piperidine-2-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (II). In an accumulation assay in NIH-MDR1-G185 cells overexpressing the human transporter Pgp using BODIPY-FL Taxol (Mol. Probes, Eugene, Ore.) as a fluorescent substrate, in vitro exhibited an cellular accumulation index of 6 for BODIPY-FL Taxol.

IT **417704-76-8P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-substituted heterocyclic compds. as regulators of cellular transport proteins for treating multidrug resistance in cancer patients)

RN 417704-76-8 CAPLUS
CN Piperazine, 1-[[(2S,4S)-1-[(3,4-dimethoxyphenyl)sulfonyl]-4-phenoxy-2-pyrrolidinyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:312015 CAPLUS
DN 136:325426
TI Preparation of piperidine derivatives useful for treating multidrug resistance and compositions thereof
IN Degenhardt, Charles Raymond; Eickhoff, David Joseph
PA The Procter & Gamble Co., USA
SO U.S., 50 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6376514	B1	20020423	US 2000-740643	20001219
	US 2002082262	A1	20020627	US 2000-740642	20001219
	US 2002091120	A1	20020711	US 2000-740279	20001219
	US 2002115659	A1	20020822	US 2000-740644	20001219
	US 2002128269	A1	20020912	US 2000-740387	20001219
	CA 2421008	AA	20020425	CA 2001-2421008	20011016
	WO 2002032869	A2	20020425	WO 2001-US42781	20011016
	WO 2002032869	A3	20020822		
	WO 2002032869	C1	20031120		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,

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          GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002014657       A5    20020429   AU 2002-14657         20011016
     EP 1326833          A2    20030716   EP 2001-983211        20011016
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004511546       T2    20040415   JP 2002-536053        20011016
     US 2002099215       A1    20020725   US 2001-996657        20011129
PRAI US 2000-241127P     P     20001017
     US 2000-740643      A     20001219
     WO 2001-US42781     W     20011016
OS   MARPAT 136:325426
GI
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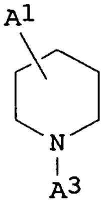

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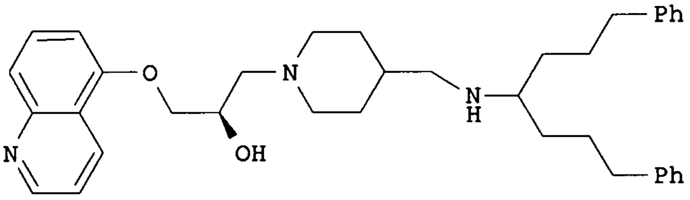


II

AB Title compds. I [A1 = [C(R1)2]x-D1-D2-R2; R1 = H, OH, alkyl, carbocyclic, arom. group; x = 0-10; R2 = alkyl, carbocyclic, arom. group; D1-2 = CO, NR3, with the proviso that wherein when D1 = NR3 then D2 = CO and when D2 = NR3, D1 = CO; R3 = H, R2; A3 = D4-[C(R1)2]t-D5; t = 0-6; D4 = CO, CHR1; D5 = NHR6, OR6; R6 = quinolyl] were prepd. For instance, (R)-5-oxiranylmethoxyquinoline was prepd. from (R)-glycidyl tosylate and 5-hydroxyquinoline (DMF, NaH), and used to alkylate piperidine-4-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (prepn. given; i-PrOH, 70.degree.C, 18 h) to give II. The half-max. inhibition of MDR1-ATPase, Ki (stimulated by 30-40 .mu.M verapamil) for II = 0.3 .mu.M. I are useful for treating multidrug resistance and can be formulated optionally with a therapeutic agent, e.g., Taxol.

IT **414867-00-8P**

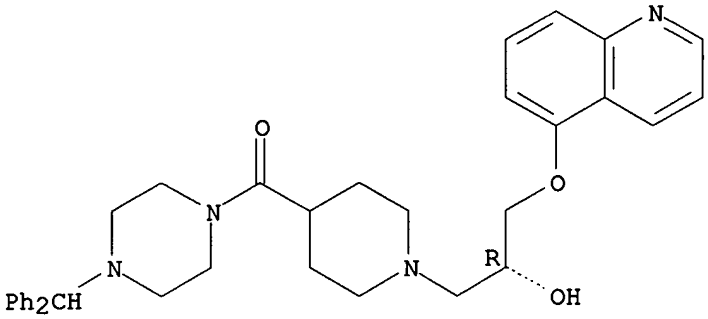
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of piperidine derivs. useful for treating multidrug resistance and compns. thereof)

RN 414867-00-8 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[1-[(2R)-2-hydroxy-3-(5-quinolinyloxy)propyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 16 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:923564  CAPLUS
DN   136:53769
TI   Preparation of ureas as anti-cancer agents
IN   Kim, Joong Young; Yoon, Byung Hoon; Hwang, Sun Kyung; Oh, Chul Min; Park,
     Mee Seon; Song, Kyoung Ok; Oh, Seong Soo
PA   Chaconne NSI Co., Ltd., S. Korea
SO   PCT Int. Appl., 97 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2001095856        A2    20011220    WO 2001-KR1017         20010613
     WO 2001095856        A3    20020627
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     KR 2001112841        A     20011222    KR 2001-33108          20010613
     AU 2001064376        A5    20011224    AU 2001-64376          20010613
     KR 2001113006        A     20011224    KR 2001-33102          20010613
     KR 2001113007        A     20011224    KR 2001-33105          20010613
     KR 2002012116        A     20020215    KR 2001-33111          20010613
     US 2002019389        A1    20020214    US 2001-880823         20010614
PRAI KR 2000-32925        A     20000615
     KR 2000-32927        A     20000615
     KR 2000-32930        A     20000615
     KR 2000-45427        A     20000805
     WO 2001-KR1017       W     20010613
OS   MARPAT 136:53769
GI
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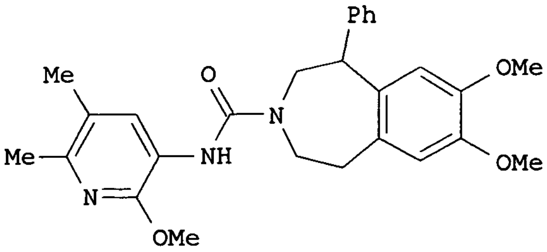


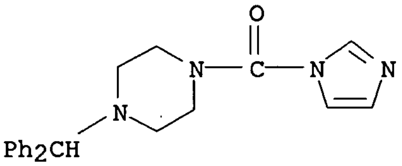
II

AB The title compds. BYC(:X)Het [I; X = O, S, NH, N(CN); Y = a bond, NH, O, S; B = alkyl, (un)substituted 3-pyridyl, diphenylmethyl, imidazol-1-yl, etc.; Het = (un)substituted 4-phenylpiperazino, 3H-benzazepin-3-yl, 4,4-diphenylpiperidino, etc.] and their pharmaceutically acceptable acid addn. salts, useful as anti-cancer agents, were prepd. Thus, reacting N-(5,6-dimethyl-2-methoxypyridin-3-yl)phenylcarbamate with 7,8-dimethoxy-1-phenyl-2,3,4,5-tetrahydro-3H-benzazepine in the presence of DBU in THF afforded 82% II. The anti-cancer activity of all exemplified compds. I was evaluated in vitro using A549 (lung cancer), SUN638 (gastric cancer), HCT116 (rectal cancer), and A431 (ovarian cancer) cell lines. Compds. I showed a superior anti-cancer activity in all mentioned above cell lines (detailed data given).

IT **381249-30-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of ureas as anti-cancer agents)

RN 381249-30-5 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-(1H-imidazol-1-ylcarbonyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:916406 CAPLUS
DN 136:31715
TI Carboxylic acids and carboxylic acid isosteres of N-heterocyclic compounds, preparation thereof, and use in the treatment of neurological and other disorders
IN Hamilton, Gregory S.; Norman, Mark H.; Wu, Yong-Qian
PA GPI Nil Holdings, Inc., USA
SO U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 204,237, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 5

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     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   US 6331537           B1    20011218    US 1999-453571         19991202
     ZA 9811063           A     20000707    ZA 1998-11063          19981203
     CA 2353460           AA    20000608    CA 1999-2353460        19991203
     WO 2000032588        A2    20000608    WO 1999-US28663        19991203
     WO 2000032588        A3    20010222
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     BR 9916461           A     20010904    BR 1999-16461          19991203
     EP 1135370           A2    20010926    EP 1999-961930         19991203
     EP 1135370           B1    20031015
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AU 767468            B2    20031113    AU 2000-18413          19991203
     AT 252078            E     20031115    AT 1999-961930         19991203
     NZ 511673            A     20040326    NZ 1999-511673         19991203
     ZA 2001004397        A     20030829    ZA 2001-4397           20010529
     NO 2001002765        A     20010720    NO 2001-2765           20010605
     NO 318909            B1    20050523
     BG 105643            A     20020228    BG 2001-105643         20010625
     US 2003186961        A1    20031002    US 2001-920017         20010802
     AU 2004200797        A1    20040325    AU 2004-200797         20040227
PRAI US 1998-87788P       P     19980603
     US 1998-204237       B2    19981203
     AU 1999-17081        A3    19981203
     US 1999-453571       A     19991202
     WO 1999-US28663      W     19991203
OS   MARPAT 136:31715
AB   N-heterocyclic carboxylic acids and carboxylic acid isosteres are
     provided, as are their prepn. and their use for treating neurol. disorders
     including phys. damaged nerves and neurodegenerative diseases, for
     treating alopecia and promoting hair growth, for treating vision disorders
     and/or improving vision, and for treating memory impairment and/or
     enhancing memory performance by administering such compds.
IT   273924-93-9P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (carboxylic acids and carboxylic acid isosteres of N-heterocyclic
        compds., prepn., and use in treatment of neurol. and other disorders)
RN   273924-93-9  CAPLUS
CN   Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3,3-dimethyl-1,2-
     dioxopentyl)-2-pyrrolidinyl]carbonyl]- (9CI)  (CA INDEX NAME)

Absolute stereochemistry.
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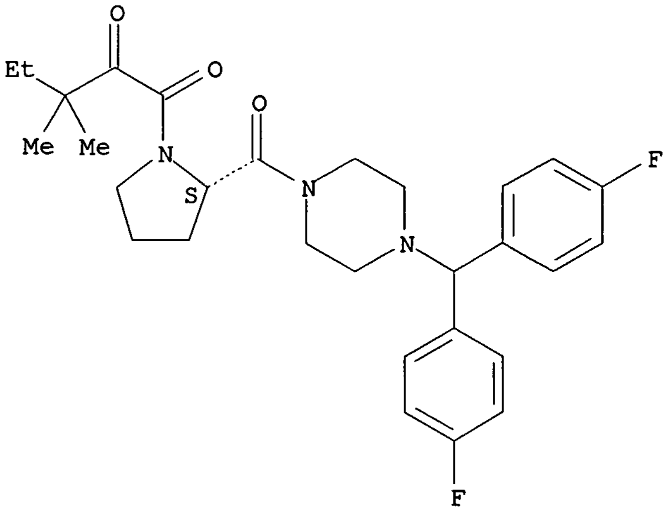

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RE.CNT  364    THERE ARE 364 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 18 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:747746  CAPLUS
DN   135:303763
TI   Preparation of pyrrolidines as inhibitors of Bax function.
IN   Halazy, Serge; Schwarz, Matthias; Quattropani, Anna; Thomas, Russel;
     Baxter, Anthony; Bombrun, Agnes
PA   Applied Research Systems Ars Holding N.V., Neth. Antilles
SO   PCT Int. Appl., 221 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2001074769        A1    20011011   WO 2001-EP3170         20010320
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2401137           AA    20011011   CA 2001-2401137        20010320
     EP 1268418           A1    20030102   EP 2001-925491         20010320
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2003529584        T2    20031007   JP 2001-572464         20010320
     US 2003171309        A1    20030911   US 2003-240000         20030428
     US 7018988           B2    20060328
PRAI EP 2000-106033       A     20000327
     WO 2001-EP3170       W     20010320
OS   MARPAT 135:303763
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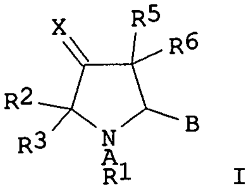


I

AB Title compds. [I; X = O, S, CR6R7, NOR6, NR6R7; A = CO, CO2, C(:NH), CONH, CSNH, SO2, SO2NH, CH2; B = CONR8R9, specified bicyclic heterocyclyl; R1 = (substituted) alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, acyl, etc.; R2-R5 = H, halo, alkyl, alkoxy; R6, R7 = H, (substituted) alkyl, alkenyl, alkynyl, alkoxy, halo, cyano, NO2, acyl, etc.; R8, R9 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl; R6R7N, R8R9N = 3-8 membered (substituted) (fused) heterocyclyl], were prepd. Thus, (2S,4EZ)-2-[[4-(1,3-benzodioxol-5-ylmethyl)-1-piperazinyl]carbonyl]-4-(methoxyimino)-N-pentyl-1-pyrrolidinecarboxamide [general prepn. from (2S,4EZ)-1-(tert-butoxycarbonyl)-4-(methoxyimino)-2-pyrrolidinecarboxylic acid, 1-isocyanatopentane, and 1-(1,3-benzodioxol-5-ylmethyl)piperazine given] at 10 .mu.M gave 59% inhibition of cytochrome C release triggered by Bid-induced Bax activation.

IT **364075-84-3P**

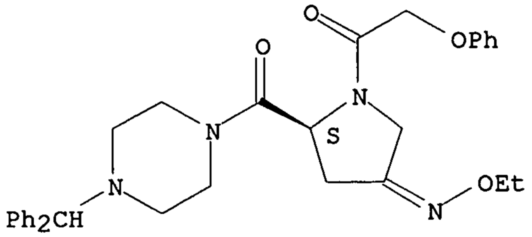
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrrolidines as inhibitors of Bax function)

RN 364075-84-3 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-4-(ethoxyimino)-1-(phenoxyacetyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:730700 CAPLUS
DN 135:288686
TI Synthesis of substituted N-acyl/sulfonyl pyrrolidine derivatives as bax inhibitors
IN Halazy, Serge; Schwarz, Matthias; Quattropani, Anna; Thomas, Russel; Baxter, Anthony; Scheer, Alexander

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PA   Applied Research Systems ARS Holding N.V., Neth. Antilles
SO   PCT Int. Appl., 219 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
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PI   WO 2001072705        A1    20011004   WO 2001-EP3171         20010320
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2401242           AA    20011004   CA 2001-2401242        20010320
     EP 1268419           A1    20030102   EP 2001-929439         20010320
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001009900        A     20030603   BR 2001-9900           20010320
     JP 2003528854        T2    20030930   JP 2001-570618         20010320
     NZ 521060            A     20040528   NZ 2001-521060         20010320
     EE 200200555         A     20040615   EE 2002-555            20010320
     ZA 2002006799        A     20030826   ZA 2002-6799           20020826
     BG 107132            A     20030430   BG 2002-107132         20020923
     NO 2002004598        A     20021125   NO 2002-4598           20020925
     US 2003212012        A1    20031113   US 2003-239912         20030210
PRAI EP 2000-106034       A     20000327
     WO 2001-EP3171       W     20010320
OS   MARPAT 135:288686
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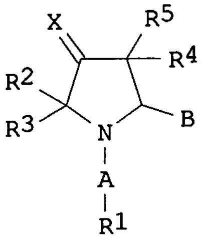
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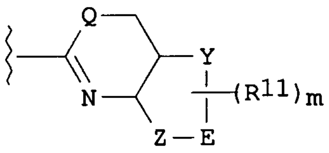
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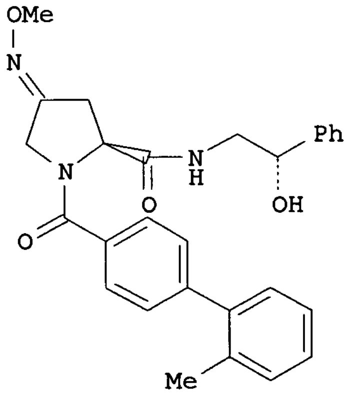

III

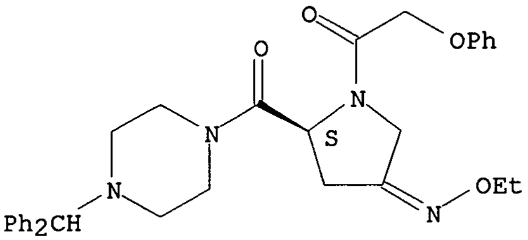
AB Title compds. I [X = CR6R7, NOR6, NNR6R7; A = C:O, C:OO, C:NH, C:ONH, C:SNH, S:O, S:ONH, CH; B = amide or II; Q = NR10, O, S; n = 0 - 2; Y, Z, E form together with the 2 C to which they are attached a 5-6 membered (hetero)aryl; R1 = alk(en/yn)yl, (hetero)aryl, cycloalkyl, acyl, etc.; R2-5 = H, halo, alkyl, alkoxy; R6-7 = H, alk(en/yn)yl, (thio)alkoxy, halogen, CN, NO2, acyl, alkoxycarbonyl, aminocarbonyl, (hetero)cycloalkyl, etc.; R11 = H, alk(en/yn)yl, OH, SH, etc. with some provisions] were prepd. and used as bax inhibitors. Over 400 compds. were disclosed. E.g., (2S)-1-(tert-butoxycarbonyl)-4-(methoxyimino)-2-pyrrolidinecarboxylic acid (prepn. given) was condensed with (S)-2-amino-1-phenylethanol (THF, i-BuOCOCl, -25.degree.C - room temp., 16 h) and the coupled product deprotected (DCM, HCl) to give the pyrrolidine. This intermediate was condensed with 4-(2-methylphenyl)benzoic acid (DMF, ClCOCOCl, Et3N, room temp.) to give a mixt. of oxime ethers which were sepd. by chromatog. to give III. III had IC50 = 0.07 .mu.M for the oxytocin receptor. I are useful in the treatment and/or prevention of disease states mediated by oxytocin, including premature labor, premature birth and dysmenorrhea.

IT **364075-84-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of substituted N-acyl/sulfonyl pyrrolidine derivs. as bax inhibitors)

RN 364075-84-3 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-4-(ethoxyimino)-1-(phenoxyacetyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



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RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 20 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:597978  CAPLUS
DN   135:166844
TI   Preparation of piperazinyl and piperidinyl ketones useful for treating or
     preventing neuronal damage and for stimulating nerve growth
IN   Tomlinson, Ronald; Lauffer, David; Mullican, Michael
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 112 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND    DATE        APPLICATION NO.          DATE
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PI   WO 2001058891        A2     20010816    WO 2001-US4210           20010209
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     EP 1257544           A2     20021120    EP 2001-912714           20010209
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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     JP 2003522767        T2     20030729    JP 2001-558441           20010209
     EE 200200442         A      20031215    EE 2002-442              20010209
     NZ 520638            A      20040528    NZ 2001-520638           20010209
     ZA 2002005933        A      20030724    ZA 2002-5933             20020724
     NO 2002003787        A      20021011    NO 2002-3787             20020809
PRAI US 2000-181944P      P      20000211
     US 2000-247330P      P      20001110
     WO 2001-US4210       W      20010209
OS   MARPAT 135:166844
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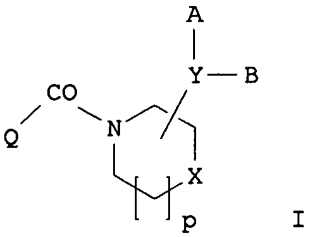
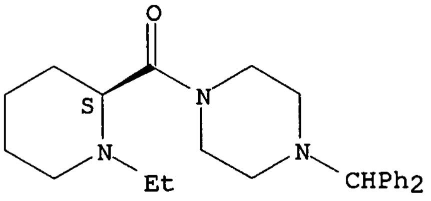


I

AB The present invention relates to piperazine and piperidine derivs. I (e.g. 1-[(S)-2-(1,1-diphenylmethyl)pyrrolidin-1-yl]-1-((S)-1-ethylpiperidin-2-yl)methanone), which are esp. useful for treating or preventing neuronal damage, particularly damage assocd. with neurol. diseases. These compds. are also useful for stimulating nerve growth. The invention also provides compns. comprising the compds. of the present invention and methods of using those compns. for treating or preventing neuronal damage or for stimulating nerve growth. In I, each Q is a monocyclic, bicyclic or tricyclic ring system wherein in said ring system: a. each ring is independently partially unsatd. or fully satd.; b. each ring comprises 3 to 7 ring atoms independently = C, N, O or S; c. .ltoreq.4 ring atoms in Q are selected from N, O or S; d. any S is optionally replaced with S(O) or S(O)2; e. at least one ring comprises a N ring atom that is substituted with R1; f. 1-5 H atoms in Q are optionally and independently replaced with halo, -OH, :O, :N-OR1, (C1-C6)-straight or branched alkyl, Ar-substituted-(C1-C6)-straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, Ar-substituted-(C2-C6)-straight or branched alkenyl or alkynyl, O-(C1-C6)-straight or branched alkyl, O-[(C1-C6)-straight or branched alkyl]-Ar, O-(C2-C6)-straight or branched alkenyl or alkynyl, O-[(C2-C6)-straight or branched alkenyl or alkynyl]-Ar, or O-Ar; and g. Q is not an indole or a pyroglutamic moiety. Each R1 is independently selected from (C1-C6)-straight or branched alkyl, Ar-substituted-(C1-C6)-straight or branched alkyl, cycloalkyl-substituted-(C1-C6) straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, or Ar-substituted-(C2-C6)-straight or branched alkenyl or alkynyl. One to two CH2 groups of said alkyl, alkenyl, or alkynyl chains in R1 are optionally and independently replaced with O, S, S(O), S(O)2, C(O) or N(R2), wherein when R1 is bound to N, the CH2 group of R1 bound directly to said N cannot be replaced with C(O). Ar = Ph, 1-naphthyl, 2-naphthyl, indenyl, azulenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyraxolyl, pyrazolinyl, pyrazolidinyl, isoxazolyl, isothiazolyl, 1,2,3-oxadiazolyl, 1,2,3-triazolyl, 1,3,4-thiadiazolyl, 1,2,4-triazolyl, 1,2,4-oxadiazolyl, 1,2,4-thiadiazolyl, 1,2,3-thiadiazolyl, benzoxazolyl, pyridazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, pyrazinyl, 1,3,5-triazinyl, 1,3,5-trithianyl, indolizinyl, indolyl, isoindolyl, 3H-indolyl, indolinyl, benzo[b]furanyl, benzo[b]thiophenyl, 1H-indazolyl, benzimidazolyl, benzthiazolyl, purinyl, 4H-quinolizinyl, quinolinyl, 1,2,3,4-tetrahydroisoquinolinyl, isoquinolinyl, 1,2,3,4-tetrahydroquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, 1,8-naphthyridinyl, or any other chem. feasible monocyclic or bicyclic ring system, wherein each ring consists of 5 to 7 ring atoms and wherein each ring comprises 0 to 3 heteroatoms independently selected from N, O, or S. Each Ar is optionally and independently substituted with 1-3 substituents selected from halo, hydroxy, nitro, -SO3H, :O, trifluoromethyl, trifluoromethoxy, (C1-C6)-straight or branched alkyl, (C1-C6)-straight or branched alkenyl, O-[(C1-C6)-straight or branched alkyl], O-[(C1-C6)-straight or branched alkenyl], O-benzyl, O-Ph, 1,2-methylenedioxy, -(R3)(R4), carboxy, N-(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) carboxamides, N,N-di(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) carboxamides, N-(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) sulfonamides, or N,N-di(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) sulfonamides. Each of R3 and R4 = (C1-C6)-straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, H, Ph or benzyl; or wherein R3 and R4 are taken together with the N atom to which they are bound to form a 5-7 membered heterocyclic ring. Each R2 = H, (C1-C6) straight or branched alkyl, or (C2-C6)-straight or branched alkenyl or alkynyl. X = C(R2)2, N, N(R2), O, S, S(O), or S(O)2. Y = a bond, -O-, (C1-C6)-(straight or branched) alkyl, or (C2-C6)-(straight or branched) alkenyl or alkynyl; wherein Y is bonded to the depicted ring via a single bond or a double bond; and wherein one to two of the CH2 groups of said alkyl, alkenyl, or alkynyl is optionally and independently replaced with O, S, S(O), S(O)2, C(O) or N(R). P = 0-2; each of A and B is independently selected from H or Ar; or one of A or B is absent; and wherein two C ring atoms in the depicted ring structure may be linked to one another via a C1-C4 straight alkyl or a C2-C4 straight alkenyl to create a bicyclic moiety. Results of a neuroprotection assay are tabulated for about 150 of the claimed compds. About 70 example prepns. are included.

IT **354563-61-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of piperazinyl and piperidinyl ketones useful for treating or preventing neuronal damage and for stimulating nerve growth)
RN 354563-61-4 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:246566 CAPLUS
DN 134:280864
TI Preparation of 6-azauracil derivatives as thyroid receptor ligands
IN Dow, Robert Lee; Chiang, Yuan-Ching Phoebe; Estep, Kimberly Gail
PA Pfizer Products Inc., USA
SO Eur. Pat. Appl., 153 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

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     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   EP 1088819           A2    20010404    EP 2000-308112         20000918
     EP 1088819           A3    20010411
     EP 1088819           B1    20050615
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AT 297905            E     20050715    AT 2000-308112         20000918
     PT 1088819           T     20050930    PT 2000-308112         20000918
     ES 2240017           T3    20051016    ES 2000-308112         20000918
     JP 2001114768        A2    20010424    JP 2000-282882         20000919
     JP 3763565           B2    20060405
     US 6787652           B1    20040907    US 2000-671668         20000927
     CA 2321380           AA    20010330    CA 2000-2321380        20000928
     CA 2321380           C     20060530
     BR 2000004539        A     20010417    BR 2000-4539           20000929
     US 2004157844        A1    20040812    US 2004-763451         20040123
     US 6930107           B2    20050816
PRAI US 1999-156842P      P     19990930
     US 2000-671668       A1    20000927
OS   MARPAT 134:280864
GI
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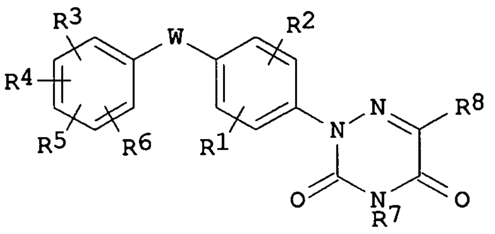

I

AB Title compds. [I; W = O, S, SO, SO2, NR30, CO, CH:CH, CH2, CHF, CF2, CH(OH); R1, R2 = H, halo, alkyl, cyano, OR12, CF3; R3 = H, halo, cyano, NO2, (substituted) alkyl, etc.; R4 = CR14R15R16, CONR19R20, aryl, heteroaryl, etc.; R3R4 = (CH2)b, Q(CH2)c, etc.; b = 3-7; c = 2-6; R5 = OR23; R4R5 = CR31:CR32NH, CR31:CR32S, etc.; R7 = H, alkyl, haloalkyl, (CH2)nCO2R9; n = 0-3; R8 = H, alkyl, CO2R9, CONR10R11; R9 = (substituted) alkyl, alkenyl, dialkenyl, cycloalkyl, aryl, heterocyclyl; R10, R11 = H, (substituted) alkyl, cycloalkyl, alkenyl, heterocyclyl; R10R11 = heterocyclyl; R12 = H, (substituted) alkyl; R14 = H, alkyl, OR34; R15 = H, alkyl; R14R15 = O; R16 = H, (substituted) alkyl, alkylcycloalkyl, alkylaryl, alkylheterocyclyl; R19, R20 = H, (substituted) alkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, cycloalkyl, etc.; R23 = H, (substituted) alkyl, COR24; R24 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heteroaryl; R30 = H, (substituted) alkyl, alkenyl, cycloalkyl, COR31, etc.; R31 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heteroaryl, etc.; R32 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl; R34 = (substituted) aryl, heterocyclyl, alkyl, alkenyl, cycloalkyl], were prepd. for treatment of obesity, hyperlipidemia, thyroid disease, hypothyroidism, thyroid cancer, diabetes, atherosclerosis, hypertension, coronary heart disease, hypercholesteremia, depression, osteoporosis, cardiac arrhythmia, glaucoma and heart failure (no data). Thus, [[[4-(3-bromo-4-methoxyphenoxy)-3,5-dimethylphenyl]hydrazono]cyanoacetyl]carbamic acid Et ester (prepn. given)

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     was heated with KOAc in HOAc at 120.degree. for 5 h to give
     2-[4-(3-bromo-4-methoxyphenoxy)-3,5-dimethylphenyl]-3,5-dioxo-2,3,4,5-
     tetrahydro-1,2,4-triazine-6-carbonitrile.
IT   332932-24-8P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of azauracil derivs. as thyroid receptor ligands)
RN   332932-24-8  CAPLUS
CN   Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[2-[4-(3-bromo-4-
     hydroxyphenoxy)-3,5-dimethylphenyl]-2,3,4,5-tetrahydro-3,5-dioxo-1,2,4-
     triazin-6-yl]carbonyl]- (9CI)  (CA INDEX NAME)
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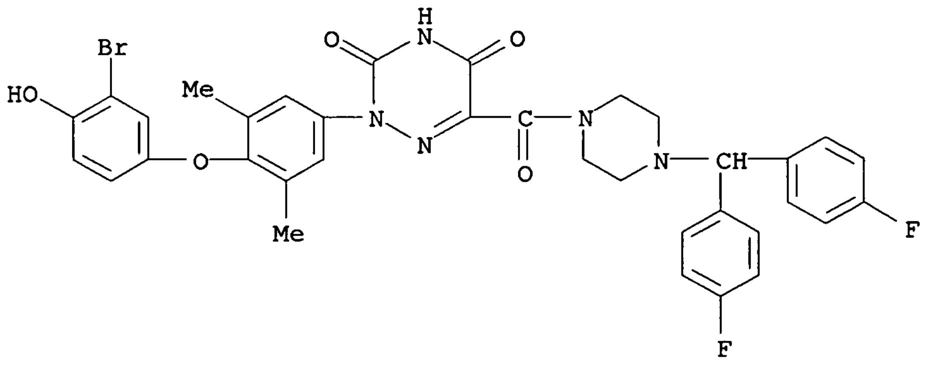

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L6   ANSWER 22 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:78374  CAPLUS
DN   134:147596
TI   2-Arylimino-2,3-dihydrothiazoles, processes for their preparation, and
     their use as somatostatin receptor ligands
IN   Moinet, Christophe; Sackur, Carole; Thurieau, Christophe
PA   Societe de Conseils de Recherches et d'Applications Scientifiques
     (S.C.R.A.S, Fr.
SO   PCT Int. Appl., 428 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2001007424        A1    20010201    WO 2000-FR2095         20000721
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             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
        RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2796643           A1    20010126    FR 1999-9496           19990722
     FR 2796643           B1    20050429
     CA 2382940           AA    20010201    CA 2000-2382940        20000721
     BR 2000012647        A     20020409   BR 2000-12647          20000721
     EP 1202980           A1    20020508   EP 2000-958575         20000721
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003505453        T2    20030212   JP 2001-512509         20000721
     NZ 516599            A     20040130   NZ 2000-516599         20000721
     AU 782187            B2    20050707   AU 2000-70053          20000721
     RU 2266287           C2    20051220   RU 2002-104574         20000721
     US 6727269           B1    20040427   US 2002-31429          20020115
     NO 2002000314        A     20020306   NO 2002-314            20020121
PRAI FR 1999-9496         A     19990722
     WO 2000-FR2095       W     20000721
OS   MARPAT 134:147596
GI
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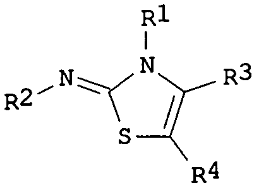

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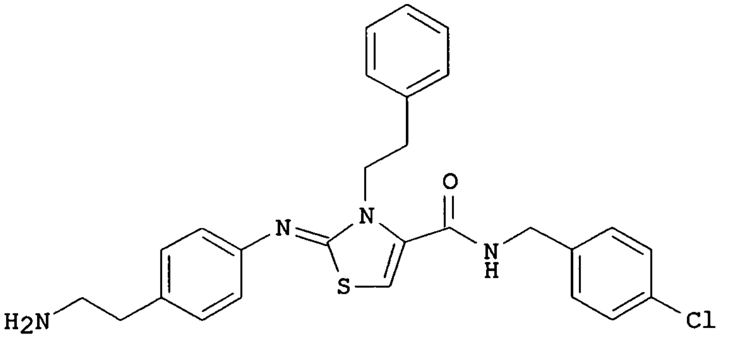

II

AB   The invention concerns novel 2-arylimino-2,3-dihydrothiazole derivs. I and their racemates, enantiomers, combinations, and salts [wherein R1 = (un)substituted, particularly amino-substituted alk(en/yn)yl, (hetero)aryl, aralkyl, cycloalkyl, etc.; R2 = (un)substituted carbocyclic or heterocyclic aryl; R3 = alkyl, adamantyl, (un)substituted (hetero)aryl or (hetero)aralkyl, (un)substituted carbamoyl; R4 = H, alkyl, (un)substituted (hetero)aralkyl, etc.]. Also disclosed are methods of their prepn. and their use as medicines, in particular for treating a wide variety of pathol. conditions or diseases involving somatostatin receptors. In particular, these pathol. conditions include acromegaly, pituitary adenoma, endocrine gastroenteropancreatic tumors (including the carcinoid syndrome), and gastrointestinal bleeding. Examples include 6 detailed syntheses, a listing of over 2800 characterized invention compds., and various precursor prepns. For instance, 4-H2NC6H4CH2CH2NH2 was bound to Wang resin p-nitrophenylcarbonate (at the aliph. amino group), and the resin-bound amine reacted sequentially with PhCH2CH2NCS, bromopyruvic acid, and 4-ClC6H4CH2NH2 to give, after acidic cleavage, (Z)-isomeric title compd. II. Ten selected compds. I inhibited binding of [125I-Tyr11]SRIF-14 to human somatostatin receptors in vitro with Ki < 200

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     nM.
IT   322747-62-6P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (drug candidate; prepn. of (arylimino)dihydrothiazoles as somatostatin
        receptor ligands)
RN   322747-62-6  CAPLUS
CN   Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(3-nitrophenyl)imino]-4-
     thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI)  (CA INDEX NAME)
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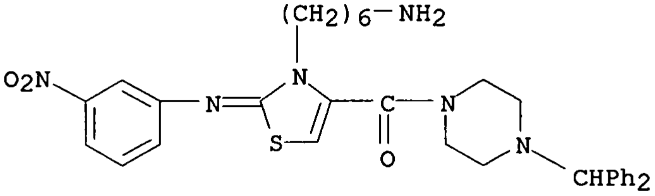

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RE.CNT  27    THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 23 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2000:911229  CAPLUS
DN   134:56687
TI   Preparation of dihydropyrimidine derivatives as N-type calcium channel
     antagonists
IN   Ohno, Seiji; Okajima, Akiko; Niwa, Seiji; Kito, Morikazu; Takahara, Akira;
     Ono, Yukitsugu; Kajigaya, Yuki; Takeda, Tomoko; Koganei, Hajime
PA   Ajinomoto Co., Inc., Japan
SO   PCT Int. Appl., 139 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2000078730        A1    20001228   WO 2000-JP4107         20000622
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1193259           A1    20020403   EP 2000-940812         20000622
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 2002143023        A1    20021003   US 2001-25589          20011226
     US 6855716           B2    20050215
PRAI JP 1999-177493       A     19990623
     JP 1999-277717       A     19990930
     WO 2000-JP4107       W     20000622
OS   MARPAT 134:56687
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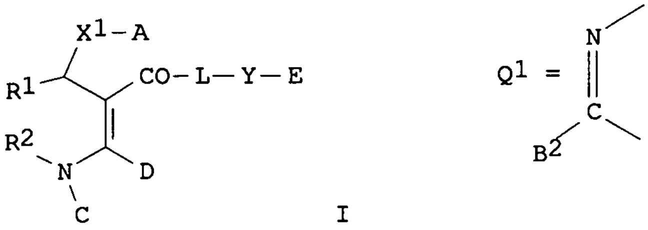
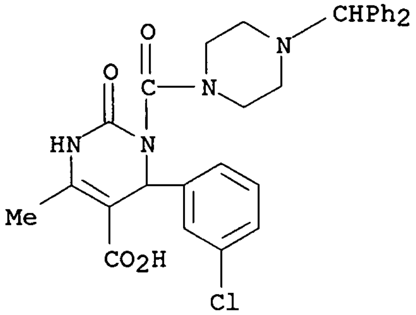


AB The title compds. I [R1 and R2 together form Q1, etc.; B2 = amino, etc.; A = 1-naphthyl, etc.; E = H, (un)substituted heteroaryl, etc.; C = H, alkyl, etc.; D = H, alkyl, etc.; L = O (with a proviso), etc.; Y = bond (with a proviso), etc.; X1 = CH2, etc.] are prepd. I exhibit selective antagonist activity against the N-type calcium channel. In an in vitro test for N-type calcium channel antagonism, 4-(3-chlorophenyl)-6-[(2-cyclohexylethoxy)methyl]-5-(3,3-diphenylpropylcarbamoyl)-2-phenyl-1,4-dihydropyrimidine showed the pIC50 value of 5.9.

IT **313999-83-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dihydropyrimidine derivs. as N-type calcium channel antagonists)

RN 313999-83-6 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 6-(3-chlorophenyl)-1-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-1,2,3,6-tetrahydro-4-methyl-2-oxo- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:911218 CAPLUS
DN 134:71495
TI Preparation of dihydropyridine derivatives as N-type calcium channel antagonists

IN Nakanishi, Chika; Masuzawa, Yoko; Hagihara, Masako; Yamamoto, Takashi; Matsueda, Hiroyuki; Ohno, Seiji; Niwa, Seiji; Kito, Morikazu; Takahara, Akira; Ono, Yukitsugu; Takeda, Tomoko; Kajigaya, Yuki; Koganei, Hajime
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

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PI   WO 2000078719        A1    20001228    WO 2000-JP4105        20000622
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1191021           A1    20020327    EP 2000-940810        20000622
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 2002147222        A1    20021010    US 2001-22874         20011220
PRAI JP 1999-177491       A     19990623
     WO 2000-JP4105       W     20000622
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OS MARPAT 134:71495
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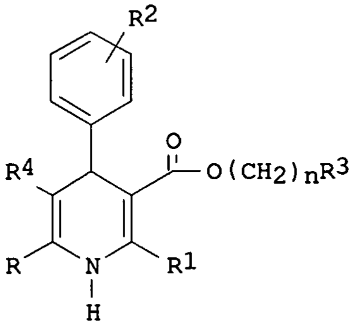

I

AB Title compds. [I; R = CH3, substituted alkyl; R1 = CH3, C6H5CH2OCH2CH2OCH2, CH3OCH2, CH3CH2, CH2O(CH2)2OCH2C6H5; R2 = 3-Cl, 2-NO2, 3-NO2, 3-COOH; R3 = H, (C6H5)2CH, (C6H5)2CHCH2CH:CH, (C6H5)2(HO)C; R4 = COOH, CONH2, CN, CONH(CH2)2N(CH3)2; n = 0, 1, 2, 3; etc], analogs and pharmaceutically acceptable salts are prepd. and are showing a selective N-type calcium channel inhibitory activity. Title compds. are usable as remedies for various diseases in which N-type calcium channel participates. Thus, the title compd. I (R = CH3; R1 = CH2OCH2CH2N(CH2)5; R2 = 3-Cl; R3 = H; R4 = OH; n = 2) was prepd.

IT **314775-30-9P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

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     study); PREP (Preparation); USES (Uses)
        (prepn. of dihydropyridine derivs. as N-type calcium channel
        antagonists)
RN   314775-30-9  CAPLUS
CN   3-Pyridinecarboxylic acid, 4-(3-chlorophenyl)-5-[[4-(diphenylmethyl)-1-
     piperazinyl]carbonyl]-1,4-dihydro-2,6-dimethyl-, 3,3-diphenylpropyl ester
     (9CI)  (CA INDEX NAME)
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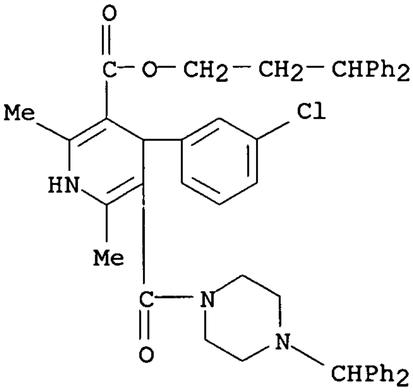

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RE.CNT  28    THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 25 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2000:384175  CAPLUS
DN   133:30959
TI   Preparation of prolinylalkanediones and related compounds for treating
     neurological disease, vision disorders, and alopecia.
IN   Hamilton, Gregory S.; Norman, Mark H.; Wu, Yong-qian
PA   GPI Nil Holdings, Inc., USA; Amgen, Inc.
SO   PCT Int. Appl., 166 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 5
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2000032588        A2    20000608    WO 1999-US28663        19991203
     WO 2000032588        A3    20010222
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6331537           B1    20011218    US 1999-453571         19991202
     CA 2353460           AA    20000608    CA 1999-2353460        19991203
     BR 9916461           A     20010904    BR 1999-16461          19991203
     EP 1135370           A2    20010926    EP 1999-961930         19991203
     EP 1135370           B1    20031015
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     AU 767468            B2    20031113    AU 2000-18413          19991203
     AT 252078            E     20031115    AT 1999-961930         19991203
     NZ 511673            A     20040326    NZ 1999-511673         19991203
     ZA 2001004397        A     20030829    ZA 2001-4397           20010529
     NO 2001002765        A     20010720    NO 2001-2765           20010605
     NO 318909            B1    20050523
     BG 105643            A     20020228    BG 2001-105643         20010625
     AU 2004200797        A1    20040325    AU 2004-200797         20040227
PRAI US 1998-204237       A     19981203
     US 1999-453571       A     19991202
     US 1998-87788P       P     19980603
     AU 1999-17081        A3    19981203
     WO 1999-US28663      W     19991203
OS   MARPAT 133:30959
GI
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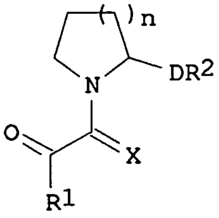

I

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AB   Title compds. [I; n = 1-3; X = O, S; R1 = (substituted) alkyl, alkenyl,
     aryl, heteroaryl, carbocyclyl, heterocyclyl; D = bond, (substituted)
     alkyl, alkenyl, alkynyl; R2 = CO2H, (substituted) CO2H isostere], were
     prepd.  Thus, L-proline Me ester hydrochloride in CH2Cl2 was treated with
     Et3N and then with MeO2CCOCl to give 88% Me (2S)-1-(1,2-dioxo-2-
     methoxyethyl)-2-pyrrolidinecarboxylate.  The latter in THF at -78.degree.
     was treated with 1,1-dimethylpropylmagnesium chloride followed by 3 h
     stirring at -78.degree. to give 75% Me (2S)-1-(1,2-dioxo-3,3-
     dimethylpentyl)-2-pyrrolidinecarboxylate.  This was stirred overnight with
     aq. LiOH in MeOH to give 87% (2S)-1-(1,2-dioxo-3,3-dimethylpentyl)-2-
     pyrrolidinecarboxylic acid.  In the MPTP model of Parkinson's disease in
     mice, I at 10 mg/kg orally gave 10.4-46.5% recovery of TH-stained
     dopaminergic neurons.
IT   273924-93-9P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of prolinylalkanediones and related compds. for treating
        neurol. disease, vision disorders, and alopecia)
RN   273924-93-9  CAPLUS
CN   Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3,3-dimethyl-1,2-
     dioxopentyl)-2-pyrrolidinyl]carbonyl]- (9CI)  (CA INDEX NAME)

Absolute stereochemistry.
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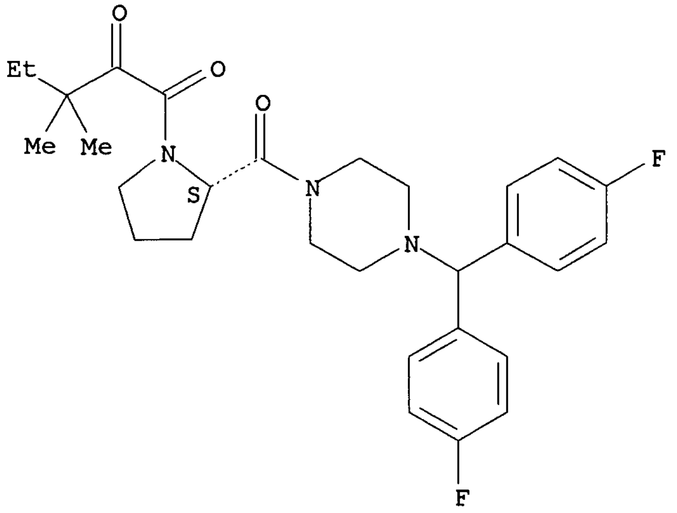

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L6   ANSWER 26 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1997:499179  CAPLUS
DN   127:176441
TI   Preparation of N-heterocyclylalkyl- or N-[(polycyclyl)-alkyl]-N'-
     substituted piperazines as insecticides.
IN   Silverman, Ian R.; Ali, Syed F.; Cohen, Daniel H.; Lyga, John W.; Simmons,
     Kirk A.; Cullen, Thomas G.
PA   FMC Corp., USA
SO   PCT Int. Appl., 59 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   WO 9726252           A1    19970724   WO 1997-US804          19970115
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
     US 2007              H1    20011204   US 1997-780371         19970109
     AU 9715809           A1    19970811   AU 1997-15809          19970115
PRAI US 1996-10237P       P     19960119
     US 1997-780371       A     19970109
     WO 1997-US804        W     19970115
OS   MARPAT 127:176441
GI
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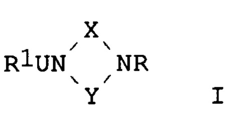

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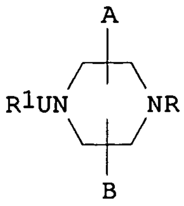


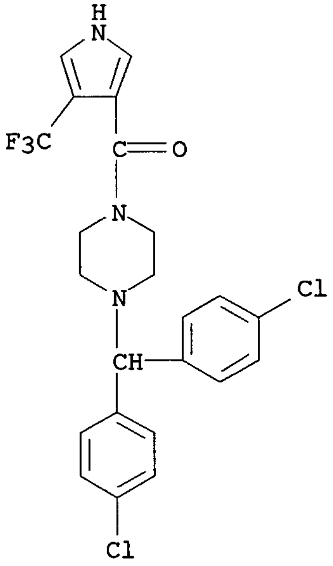
II

AB Title compds. [I; A, B = alkyl; U = alkylene, alkenylene, CHZ; Z = H, alkyl, cycloalkyl, Ph; R = (substituted) Ph, dibenzocycloalkyl, etc.; R1 = (substituted) Ph, naphthyl, tetrazolylphenyl, benzothienyl, benzimidazolyl, indolyl, pyrrolyl, quinolinyl, etc.; X = $(CH2)m$; Y = $(CH2)n$; m = 2,3; n = 1-3], were prepd. Thus, reaction of N-[bis(4-trifluoromethylphenyl)methyl]piperazine and 4-(pyrid-2-yloxy)benzyl chloride in Me2SO contg. NaI and diisopropylethylamine gave N-[4-(pyrid-2-yloxy)phenylmethyl]-N'-[bis(4-trifluoromethylphenyl)methyl]piperazine. The latter at 50 micromolar in feed gave 100% inhibition of the growth of tobacco budworms.

IT **194017-30-6P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-heterocyclylalkyl- or N-[(polycyclyl)-alkyl]-N'-substituted piperazines as insecticides)

RN 194017-30-6 CAPLUS

CN Piperazine, 1-[bis(4-chlorophenyl)methyl]-4-[[4-(trifluoromethyl)-1H-pyrrol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:758993 CAPLUS
DN 123:228219

TI Anti-allergic and anti-inflammatory pyridine and pyridine N-oxide derivatives of (diarylmethyl)piperidines or -piperazines, and compositions and methods of use thereof

IN Piwinski, John J.; Wong, Jesse; Green, Michael J.; Seidl, Vera; Friary, Richard

PA Schering Corp., USA

SO U.S., 38 pp. Cont.-in-part of U.S. Ser. No. 595,330 abandoned.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

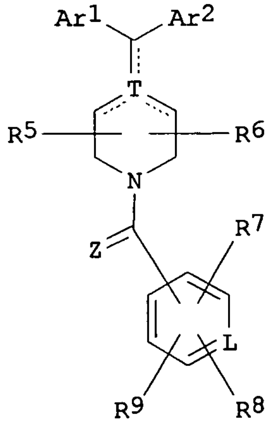
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5432175	A	19950711	US 1993-30454	19930401
	WO 9206971	A1	19920430	WO 1991-US7169	19911008

W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG

PRAI	US 1990-595330	B2	19901010
	WO 1991-US7169	W	19911008

OS MARPAT 123:228219

GI



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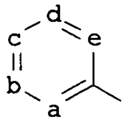

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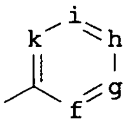

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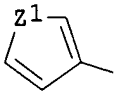


IV

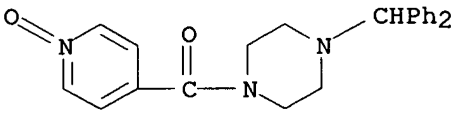
AB Pyridine and pyridine N-oxide derivs. of (diarylmethyl)piperidines or -piperazines I wherein Ar1 = II, Ar2 = III or a 5-membered heterocyclic arom. group, e.g., IV, wherein Z1 = O, S, NR10; and wherein the substitutable carbon atoms of the five-membered heterocyclic group may optionally be substituted with a group R1 as defined below; one of a, b, c, d and e represents N or NO and the others represent CH or CR1 or all of a, b, c, d and e represent CH or CR1 ; one of f, g, h, i and k represents

N or NO and the others represent CH or CR2 or all of f, g, h, i and k represent CH or CR2 ; L represents N or N+O-; R1 and R2 may be the same or different and each R1 and each R2 independently represents, e.g., halo, CF3, OR11,; R5 and R6 may be the same or different and each independently represents, e.g, H, alkyl or aryl; each of R7, R8 and R9 independently represents, e.g., H, halo, CF3; R10 represents H or alkyl; each R11 independently represents H, alkyl or aryl; T represents CH, C or N, with the dotted lines attached to T representing one double bond in one of the indicated positions when T is C and being absent when T is CH or N; and Z represents O or S (with provisos); and pharmaceutically acceptable salts thereof are disclosed, which possess anti-allergic and anti-inflammatory activity. Pharmaceutical compns. contg. and methods of using the compds. are also described. Thus, e.g., amidation of 4-[(2-pyridyl)(4-chlorophenyl)methylene]piperidine (prepn. given) with isonicotinic acid N-oxide afforded title compd. I (R5-R9 = H, T = C, Ar1 = 2-pyridyl, Ar2 = 4-ClC6H4, with the double bond Ar1Ar2C:C external to the piperidine ring; Z = O, L = N+O-; 97% yield) which demonstrated PAF antagonism in vitro with IC50 = 0.5 .mu.M, and % inhibition of agonist-induced bronchospasm (in vivo, oral) = 100% inhibition of PAF at 3mg/kg and 0% inhibition of histamine at 3 mg/kg.

IT **142404-48-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(anti-allergic and anti-inflammatory pyridine and pyridine N-oxide derivs. of (diarylmethyl)piperidines or -piperazines, and compns. and methods of use thereof)

RN 142404-48-6 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:245473 CAPLUS

DN 122:105812

TI Some 4-substituted 1-(3-pyridylmethyl)piperazines with antihistamine activity

AU Kmonicek, Vojtech; Valchar, Martin; Polivka, Zdenek

CS Research Institute Pharmacy Biochemistry, Prague, 130 60, Czech Rep.

SO Collection of Czechoslovak Chemical Communications (1994), 59(10), 2343-50
CODEN: CCCCAK; ISSN: 0010-0765

PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic

DT Journal

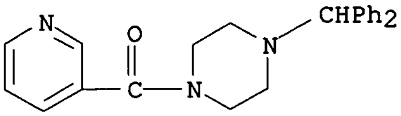
LA English

AB Several compds. derived from nicotinic acid were prepd. within a more extensive program aiming at the synthesis of new substances with expected antihistamine and antidepressant activity. Some of these compds. display certain structural resemblance with the antidepressant agent piberaline (EGYT 475, Trelibet) and its analogs. The products were used as intermediates for the synthesis of further compds. and most of them were subjected to pharmacol. testing.

IT **155348-38-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 155348-38-2 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:409423 CAPLUS

DN 121:9423

TI Process for preparation of new diphenylmethylpiperazine derivatives with antiallergic activity

IN Orjales-Venero, Aurelio; Alonso Cires, Luisa

PA Fabrica Espanola de Productos Quimicos y Farmaceuticos, S.A. (FAES), Spain

SO Span., 4 pp.
CODEN: SPXXAD

DT Patent

LA Spanish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 2046107	A1	19940116	ES 1992-500	19920305
	ES 2046107	B1	19940801		
PRAI	ES 1992-500		19920305		

OS MARPAT 121:9423

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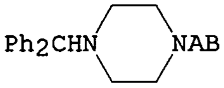


I

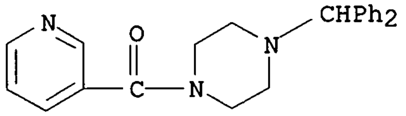
AB Title compds. I [A = CO, (CH2)nNHCO; n = 2-4; B = heteroaryl, cycloalkyl, or cycloalkenyl, which may be substituted by halo (preferably Cl or Br)] and pharmaceutically acceptable salts were prepd. by reaction of N-substituted piperazines with corresponding acid chlorides in a solvent (e.g., CH2Cl2, THF, Et2O) and in the presence of a base (e.g., Et3N, pyridine, NaHCO3) at room temp. In nearly all cases, I showed antihistaminic and antiallergic activities comparable to terfenadine and cetirizine (no data). For example, benzhydrylpiperazine and 3-pyridinecarbonyl chloride in THF at 0.degree. to room temp. gave I (A = CO, B = 3-pyridyl).

IT **155348-38-2P**, 1-(Diphenylmethyl)-4-(3-pyridinylcarbonyl)piperazine
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antiallergic and antihistaminic)

RN 155348-38-2 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-(3-pyridinylcarbonyl)- (9CI) (CA INDEX

NAME)



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L6   ANSWER 30 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1992:511641  CAPLUS
DN   117:111641
TI   Preparation of 4-(diarylmethylene)piperidines and N-
     (diarylmethyl)piperazines as allergy inhibitors and antiinflammatories
IN   Piwinski, John J.; Wong, Jesse; Green, Michael J.; Seidl, Vera; Friary,
     Richard
PA   Schering Corp., USA
SO   PCT Int. Appl., 76 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 9206971           A1    19920430   WO 1991-US7169         19911008
         W:  AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO,
             PL, RO, SD, SU, US
         RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN,
             GR, IT, LU, ML, MR, NL, SE, SN, TD, TG
     CA 2093798           AA    19920411   CA 1991-2093798        19911008
     CA 2093798           C     20000201
     AU 9188490           A1    19920520   AU 1991-88490          19911008
     AU 646519            B2    19940224
     ZA 9108044           A     19920729   ZA 1991-8044           19911008
     EP 553191            A1    19930804   EP 1991-918503         19911008
     EP 553191            B1    19950517
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 05508660          T2    19931202   JP 1991-517935         19911008
     JP 08009596          B4    19960131
     HU 66081             A2    19940928   HU 1993-1051           19911008
     ES 2072627           T3    19950716   ES 1991-918503         19911008
     IL 99676             A1    19951127   IL 1991-99676          19911008
     CZ 280532            B6    19960214   CZ 1993-622            19911008
     US 5432175           A     19950711   US 1993-30454          19930401
     NO 9301312           A     19930610   NO 1993-1312           19930406
     NO 305028            B1    19990322
     KR 9705927           B1    19970422   KR 1993-71070          19930409
PRAI US 1990-595330       A2    19901010
     WO 1991-US7169       A     19911008
OS   MARPAT 117:111641
GI
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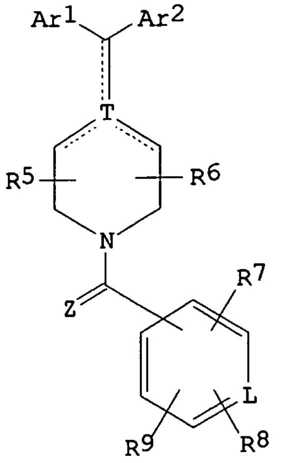

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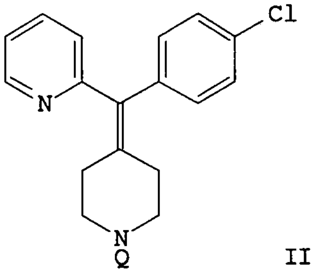
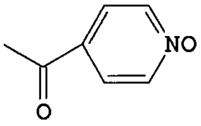


II

Q1=

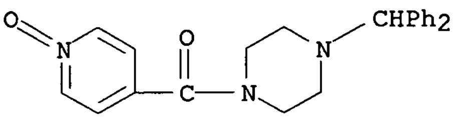


AB Title compds. [I; Ar1, Ar2 = (benzanellated) (substituted) (hetero)aryl; R5, R6 = H, aryl, (substituted) alkyl; geminal R5R6 = O, S; R7-R9 = H, halo, CF3, OR11, COR11, SR11, SOnR12, N(R11)2, NO2, cyano, CO2R11, OCO2R12, O2CR11, CON(R11)2, aryl, alkynyl, (substituted) alkyl, alkenyl, etc.; n = 1, 2; R11 = H, alkyl, aryl; R12 = alkyl, aryl; T = CH, C, N; Z = O, S, (H, H), (H, alkyl); L = N, NO; dotted lines = optional double bonds], were prepd. Thus, piperidine deriv. II (Q = H) (prepn. given), isonicotinic acid N-oxide, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride, and 1-hydroxybenzotriazole in CH2Cl2 were stirred at 0.degree.-room temp. to give 97% II (Q = Q1) (III). III at 3 mg/kg orally in guinea pigs gave 100% inhibition of platelet-activating factor (PAF)-induced bronchospasm, and 0% inhibition of histamine-induced bronchospasm. I showed varying combinations of PAF and histamine antagonist activity. Tablets and capsules were prepd. contg. III.

IT **142404-48-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as allergy inhibitor and antiinflammatory)

RN 142404-48-6 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:514494 CAPLUS

DN 115:114494

TI Preparation and formulation of thiazolidinecarboxamide derivatives as platelet-activating factor (PAF) antagonists

IN Mase, Toshiyasu; Hara, Hiromu; Nagaoka, Hitoshi; Takahashi, Takumi; Suzuki, Takeshi; Tomioka, Kenichi; Yamada, Toshimitsu

PA Yamanouchi Pharmaceutical Co., Ltd., Japan

SO U.S., 82 pp. Cont.-in-part of U.S. Ser. No. 157,406, abandoned.

CODEN: USXXAM

DT Patent

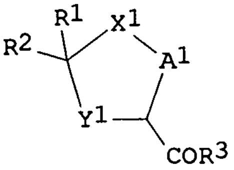
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4987132	A	19910122	US 1988-232899	19880816
	ZA 8801182	A	19881026	ZA 1988-1182	19880219
	JP 02000179	A2	19900105	JP 1988-37224	19880219
	JP 06031230	B4	19940427		
	JP 07002844	A2	19950106	JP 1993-205720	19930728
PRAI	JP 1987-36950	A	19870220		
	JP 1987-125259	A	19870521		
	JP 1987-249499	A	19871001		
	US 1988-157406	B2	19880217		
	JP 1988-13928	A1	19880125		

OS MARPAT 115:114494

GI



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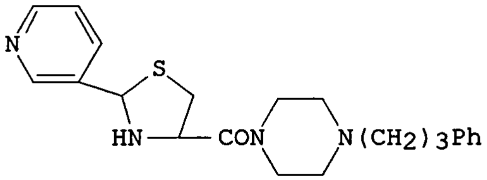


II

AB The title compds. [I; R1 = (un)substituted 5- or 6-membered hetero- or benzoheterocyclyl; R2 = H, alkyl, R1; X1 = O, S, CH2, alkylidene; Y1 = O, S, NR4; R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; A1 = CH2, CH2CH2, optionally substituted by alkyl groups; R3 = NR5R6, NHNR8R9, NR10OR11; one of R5, R6 = H, (un)substituted hydrocarbyl and the other = (un)substituted hydrocarbyl, R1; R5R6 = A2ZR7A3, A2OA3; A2, A3 = (un)substituted alkylene; Z = CH, N; R7 = H, CO2H, acyl, alkoxycarbonyl, CONH2, mono- or dialkylcarbamoyl, (un)substituted hydrocarbyl; R8-R11 = H, alkyl, aralkyl, aryl] are prepd. as PAF antagonists. Amidation of 2-(3-pyridyl)thiazolidine-4-carboxylic acid with 1-(3-phenylpropyl)piperazine using DCC in the presence of 1-hydroxybenzotriazole in DMF gave 60% (thiazolidinylcarbonyl)piperazine II, isolated as its trihydrochloride, which had an IC50 of 0.054 .mu.M in vitro for inhibition of PAF-induced rabbit platelet aggregation. Tablet formulation was given.

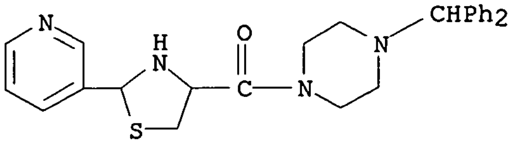
IT **118196-21-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as platelet-activating factor antagonist)

RN 118196-21-7 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

```
L6   ANSWER 32 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1991:429318  CAPLUS
DN   115:29318
TI   Preparation of pyrazole derivatives as angiotensin II antagonists
IN   Naka, Takehiko; Nishikawa, Kohei
PA   Takeda Chemical Industries, Ltd., Japan
SO   Eur. Pat. Appl., 33 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   EP 411507            A1    19910206    EP 1990-114493         19900727
     EP 411507            B1    19941026
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 03218371          A2    19910925    JP 1990-204437         19900731
     US 5183899           A     19930202    US 1990-560759         19900731
     CA 2022419           AA    19910203    CA 1990-2022419        19900801
PRAI JP 1989-200963       A     19890802
     JP 1989-235124       A     19890911
     JP 1989-293459       A     19891110
OS   MARPAT 115:29318
GI
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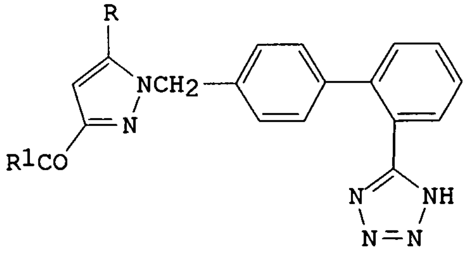

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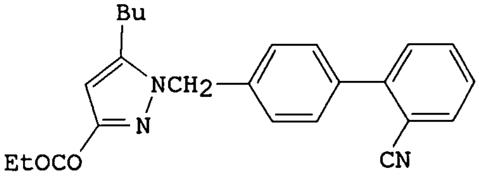


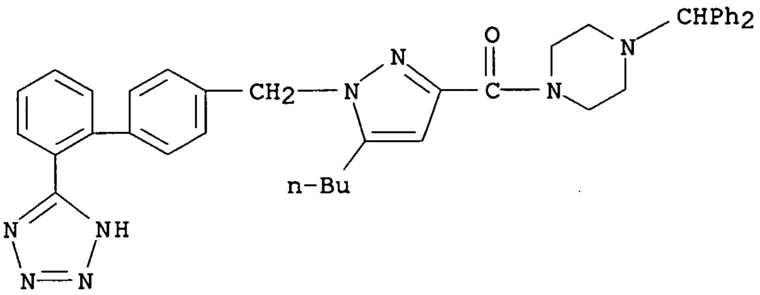
II

AB Pyrazole derivs. [I; R = alkyl; R1 = OH, alkoxy, halo, (substituted) amino], useful as angiotensin II antagonists in treating such cardiovascular disorders as hypertension, heart disease, and cerebral stroke, are prepd. Et 5-butylpyrazole-3-carboxylate and 4-(2-NCC6H4)C6H4CH2Br were added to a mixt. of 60% NaH (oil) in hexane and THF with stirring at room temp. to give 86% benzylpyrazole derivs. II, which was heated with NaN3 and NH4Cl in DMF at 110-115.degree. to give 58% tetrazole deriv. I (R = Bu, R1 = EtO) (III). III showed 75 and 92% inhibition of angiotensin II receptor binding at 1 .times. 10-6M and 1 .times. 10-5M, resp. Also prepd. and tested were 34 addnl. I. Capsule, tablet, and injection formulations were given.

IT **134401-87-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as angiotensin II antagonist)

RN 134401-87-9 CAPLUS

CN Piperazine, 1-[[5-butyl-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1H-pyrazol-3-yl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:81815 CAPLUS

DN 114:81815

TI Preparation of pyridylthiazolidine derivatives as platelet-activating factor (PAF) antagonists

IN Mase, Toshasu; Hara, Hiroshi; Nagaoka, Hitoshi; Suzuki, Takeshi; Takahashi, Takumi; Tomioka, Kenichi; Yamada, Toshimitsu

PA Yamanouchi Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF

DT Patent

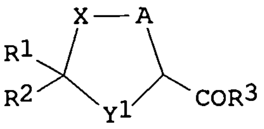
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02049726	A2	19900220	JP 1988-201555	19880811
	JP 06096532	B4	19941130		
PRAI	JP 1988-201555		19880811		

OS MARPAT 114:81815

GI



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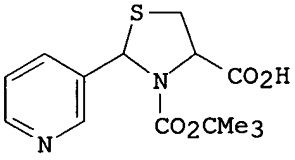

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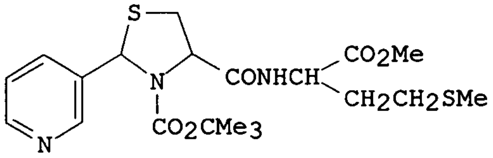


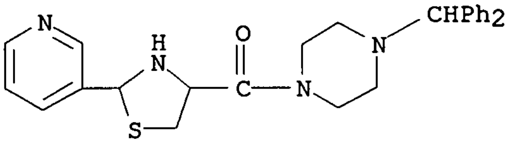
III

AB The title compds. [I; R1 = (benzo-fused) (substituted) 5- or 6-membered heterocycle; R2 = H, alkyl, R1; X = O, S, (alkyl-substituted) CH2; Y1 = O, S, NR4 wherein R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; R3 = (substituted) amino, hydrazino, etc.; A = (alkyl-substituted) CH2, CH2CH2] are prepd. L-Methionine Me ester-HCl 390, 1-hydroxybenzotriazole 390, N-methylmorpholine 190, and DCC 440 mg were added successively to a soln. of 600 mg carboxylic acid II in THF at <4.degree., and the mixt. was stirred at room temp. to give 440 mg amide III. Also prepd. were 172 addnl. I which showed platelet aggregation inhibition activity with IC50 of 0.024-0.097 .mu.M. Various formulations were also given.

IT **118196-21-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as platelet-activating factor antagonist)

RN 118196-21-7 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

L6 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1989:23877 CAPLUS
DN 110:23877
TI Saturated heterocyclic carboxamides, especially thiazolidinecarboxamides, useful as PAF antagonists, their pharmaceutical compositions, and processes and intermediates for their preparation
IN Mase, Toshiyasu; Hara, Hiromu; Nagaoka, Hitoshi; Takahasi, Takumi; Suzuki, Takeshi; Tomioka, Kenichi; Yamada, Toshimitsu
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 162 pp.

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     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND    DATE          APPLICATION NO.         DATE
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PI   EP 279681            A2     19880824      EP 1988-301397          19880219
     EP 279681            A3     19891115
         R:  AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     CN 1030415           A      19890118      CN 1988-100590          19880216
     FI 8800757           A      19880821      FI 1988-757             19880218
     FI 93113             B      19941115
     FI 93113             C      19950227
     DK 8800866           A      19880822      DK 1988-866             19880219
     NO 8800740           A      19880822      NO 1988-740             19880219
     ZA 8801182           A      19881026      ZA 1988-1182            19880219
     JP 02000179          A2     19900105      JP 1988-37224           19880219
     JP 06031230          B4     19940427
     HU 50335             A2     19900129      HU 1988-811             19880219
     AU 8812080           A1     19880825      AU 1988-12080           19880222
     AU 618726            B2     19920109
     AU 9214013           A1     19920625      AU 1992-14013           19920401
     AU 646156            B2     19940210
     JP 07002844          A2     19950106      JP 1993-205720          19930728
PRAI JP 1987-36950        A      19870220
     JP 1987-125259       A      19870521
     JP 1987-249499       A      19871001
     JP 1988-13928        A1     19880125
OS   MARPAT 110:23877
GI
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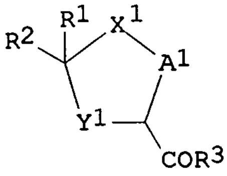

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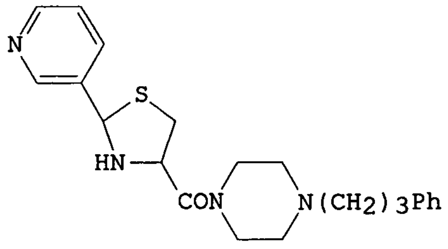
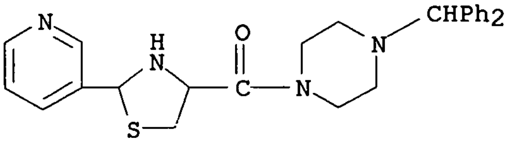


II

AB   The title compds. [I; R1 = (un)substituted 5- or 6-membered hetero- or benzohterocyclyl; R2 = H, alkyl, R1; X1 = O, S, CH2, alkylidene; Y1 = O, S, NR4; R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; A1 = CH2, CH2CH2, optionally substituted by alkyl groups; R3 = NR5R6, NHNR8R9, NR10OR11; one of R5, R6 = H, (un)substituted hydrocarbyl; the other = (un)substituted hydrocarbyl, R1; R5R6 = A2ZR7A3, A2OA3; A2, A3 = (un)substituted alkylene; Z = CH, N; R7 = H, CO2H, acyl, alkoxycarbonyl, CONH2, mono- or dialkylcarbamoyl, (un)substituted hydrocarbyl; R8-R11 = H, alkyl, aralkyl, aryl] are prepd. as antagonists of platelet-activating factor (PAF). Amidation of 2-(3-pyridyl)thiazolidine-4-carboxylic acid with 1-(3-phenylpropyl)piperazine using DCC in the presence of 1-hydroxybenzotriazole in DMF gave 60% (thiazolidinylcarbonyl)piperazine

II, isolated as its trihydrochloride. II.3HCl had an IC50 of 0.054 .mu.M in vitro for inhibition of PAF-induced rabbit platelet aggregation. Tablets were prepd. each contg. II fumarate 20, lactose 57, corn starch 33, hydroxypropylcellulose 4, and Mg stearate 1 mg.

IT **118196-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as inhibitor of platelet-activating factor)
RN 118196-21-7 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

L6 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:598361 CAPLUS
DN 107:198361
TI Pyroglutamide derivatives, procedure for their preparation, and their use as nootropics
IN Kimura, Kiyoshi; Chokai, Soichi; Tomita, Toshio; Kise, Masahiro; Nakamura, Kenichi
PA Nippon Shinyaku Co., Ltd., Japan
SO Ger. Offen., 29 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3701494	A1	19870723	DE 1987-3701494	19870120
	DE 3701494	C2	19910613		
	JP 62252761	A2	19871104	JP 1986-38024	19860221
	JP 04055405	B4	19920903		
	JP 62252762	A2	19871104	JP 1986-280453	19861125
	JP 2513197	B2	19960703		
	FR 2597100	A1	19871016	FR 1987-485	19870116
	FR 2597100	B1	19940819		
	SE 8700203	A	19870722	SE 1987-203	19870120
	SE 503436	C2	19960617		
	NL 8700119	A	19870817	NL 1987-119	19870120
	NL 192304	B	19970106		
	NL 192304	C	19970507		
	ES 2002083	A6	19880701	ES 1987-128	19870120
	CH 675418	A	19900928	CH 1987-195	19870120
	DE 3744947	C2	19920716	DE 1987-3744947	19870120
	CA 1323874	A1	19931102	CA 1987-527706	19870120
	GB 2185483	A1	19870722	GB 1987-1245	19870121
	GB 2185483	B2	19901024		

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     BE 1003248           A5     19920211     BE 1987-36               19870121
     JP 63146857          A2     19880618     JP 1987-154238           19870619
     FR 2613366           A1     19881007     FR 1987-13376            19870928
     FR 2613366           B1     19940819
     US 5102882           A      19920407     US 1991-661523           19910226
PRAI JP 1986-11359        A      19860121
     JP 1986-11360        A      19860121
     JP 1986-175168       A      19860724
     US 1987-5255         B1     19870120
     US 1988-286652       B1     19881219
OS   CASREACT 107:198361; MARPAT 107:198361
GI
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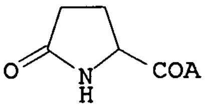

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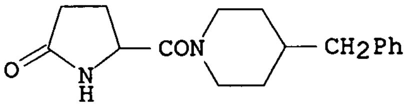


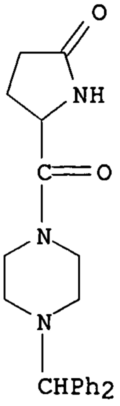
II

AB Pyroglutamide derivs. I (A = cyclic amino group) which a) in the ring, besides 1 N atom, there are more N atoms as hetero atoms or only 1 N atom as hetero atom whereby b) the unsubstituted pyrrolidino group and the unsubstituted piperidine group are excepted, and their salts, useful as nootropic agents and thus for the treatment of dementia including memory loss, were prepd. by 5 methods. Me pyroglutamate reacted with 4-benzylpiperidine in PhMe under reflux in 24 h to give II. The min. ED to restore memory loss in rats due to scopalamine, electroshock, or CO2-induced memory loss was 10 mg/kg D-I (A = piperidine) orally, vs. 50 mg/kg for aniracetam. A formulation for injection comprised 5 wt.% DL-I (A = piperidine) in physiol. saline.

IT **110957-15-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as nootropic)

RN 110957-15-8 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(5-oxo-2-pyrrolidinyl)carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

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AN   1971:436445  CAPLUS
DN   75:36445
TI   4'-Nicotinoyl-d-lysergopiperazide
IN   Stuetz, Peter
PA   Sandoz Ltd.
SO   Ger. Offen., 19 pp.
     CODEN: GWXXBX
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   DE 2044163           A     19710311   DE 1970-2044163        19700905
     CH 523887            A     19720615   CH 1969-523887         19690910
     CH 523888            A     19720615   CH 1969-523888         19690910
     US 3752815           A     19730814   US 1970-69930          19700904
     NL 7013306           A     19710312   NL 1970-13306          19700909
     FR 2070681           A5    19710917   FR 1970-32700          19700909
PRAI CH 1969-13651        A     19690910
     CH 1969-13652        A     19690910
GI   For diagram(s), see printed CA Issue.
AB   The saluretic, antiphlogistic, edema-inhibiting, and sedative title compd.
     (I) was prepd. Thus, 1-tritylpiperazine and nicotinoyl chloride (II) in
     pyridine gave 1-nicotinoyl-4-tritylpiperazine (III).  Treatment of III
     with HCl(g) in MeOH gave 1-nicotinoylpiperazine (IV).  ClCOCOCl in MeCN
     was added to DMF-MeCN at -10.degree., D-lysergic acid (V) added, and IV in
     pyridine added to give I.  V was added to 0.degree. to a suspension
     obtained from ClCOCOCl, MeCN, and DMF, piperazine added, the reaction
     mixt. kept 4 hr at 0.degree., and the product treated with II.HCl at room
     temp. to give I.
IT   32422-97-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN   32422-97-2  CAPLUS
CN   Piperazine, 1-nicotinoyl-4-trityl- (8CI)  (CA INDEX NAME)
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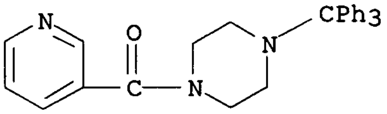

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L6   ANSWER 37 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1967:55517  CAPLUS
DN   66:55517
TI   1-Arylideneamino-4-(4-benzhydryl-1-piperazinylcarbonyl)piperazines
IN   Cusic, John W.; Yonan, Peter
PA   G.D. Searle and Co.
SO   U.S., 2 pp.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   US 3297689                 19670110    US 1965-423582          19650105
GI   For diagram(s), see printed CA Issue.
AB   1-Benzhydryl-4-(4-amino-1-piperazinylcarbonyl)piperazine (I), the
     intermediate to the title compds., is prepd. as follows: A soln. of 126
     parts 1-benzhydrylpiperazine in 600 parts CHCl3 is added portionwise to a
     0-5.degree. soln. of 80 parts COCl2 in 600 parts CHCl3, the mixt. stirred
     at 0-5.degree. 1.5 hrs., allowed to warm to room temp., dild. with 1125
     parts CHCl3, and neutralized by cautious addn. of 150 parts K2CO3, the
     resultant mixt. filtered, and the filtrate treated conventionally to
     isolate 4-benzhydrylpiperazine-1-carbonyl chloride (II), m. 140-1.degree..
     A mixt. of 20 parts II, 11 parts 1-nitrosopiperazine, 20 parts Et3N, and
     225 parts CHCl3 is refluxed 18 hrs. on a steam bath and an addnl. 150
     parts CHCl3 added to the mixt. which is then washed with several portions
     of H2O, dried, and evapd. to give 1-benzhydryl-4-(4-nitroso-1-
     piperazinylcarbonyl)-piperazine (III), m. 152-3.degree..  To a soln. of 27
     parts III in 210 parts glacial HOAc is added 60 parts H2O, the mixt.
     heated to 45.degree., 35 parts Zn dust added over 30 min. while temp. is
     maintained at about 45.degree., the mixt. heated at about 50.degree. 1.5
     hrs. and filtered while hot, and the filtrate dild. with 500 parts H2O,
     cooled in an ice bath, and made alk. by addn. of 250 parts NaOH in 250
     parts H2O.  Conventional isolation gives I.  A soln. of 5 parts I, 2 parts
     piperonal, and 1 drop HOAc in 40 parts EtOH is heated on a steam bath
     about 5 min. and the resultant soln. cooled to sep. 1-piperonylideneamino-
     4-(4-benzhydryl-1-piperazinylcarbonyl)piperazine (IV), m. 170-1.degree..
     Similarly, 4 parts I and 3 parts 4-hydroxybenzaldehyde in 40 parts EtOH
     heated on a steam bath 5 min. give 1-(4-hydroxybenzylideneamino)-4-(4-
     benzhydryl-1-piperazinylcarbinol)piperazine, m. 261-3.degree..  Compds. of
     type I are pharmacol. active, as anti-ulcer agents, antihypertensive
     agents, and inhibitors of hepatic synthesis of cholesterol.
IT   13521-98-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN   13521-98-7  CAPLUS
CN   Piperazine, 4-(diphenylmethyl)-4'-nitroso-1,1'-carbonyldi- (8CI)  (CA
     INDEX NAME)
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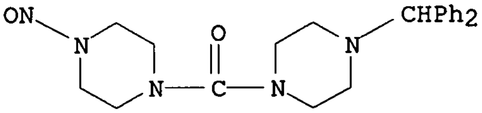

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L6   ANSWER 6 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:902341  CAPLUS
DN   141:379919
TI   Preparation of (iso)thiazole benzenesulfonamides and other heterocycles as
     inhibitors of fungal invasion
IN   Talley, John Jeffrey; Fretzen, Angelika; Zimmerman, Craig; Barden,
     Timothy.; Yang, Jing Jing; Martinez, Eduardo; Milne, G. Todd; Etchell, A.
     Cordero; Christine, M. Pierce; Houman, Fariba; Busby, Robert; Summers,
     Eric F.; Antonelli, Stephen; Lee, Peter; Farwell, Michael; Mayorga, Maria;
     O'Leary, Jessica
PA   Microbia, Inc., USA
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SO    PCT Int. Appl., 179 pp.
      CODEN: PIXXD2
DT    Patent
LA    English
FAN.CNT 1
      PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
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PI    WO 2004092123        A2     20041028    WO 2004-US11187        20040412
      WO 2004092123        A3     20050519
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
              ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
              SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
              TD, TG
PRAI  US 2003-461727P      P      20030410
      US 2003-469286P      P      20030509
      US 2003-485678P      P      20030709
OS    MARPAT 141:379919
GI
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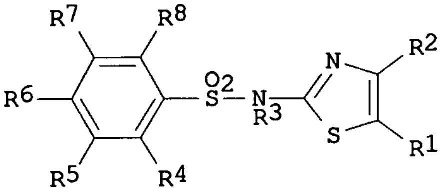

I

```
AB    Title compds. e.g. [I; R1 = (substituted) alkyl, alkoxy; R2 = H, halo; R3
      = H, CHO, Ac, (substituted) alkyl; R4 = H, halo, (substituted) alkyl,
      cycloalkyl, alkenyl, alkynyl, alkylamino, Ph, heteroaryl], were prepd.
      Thus, 4-bromo-2-fluoro-N-(5-methylthiazol-2-yl)benzenesulfonamide,
      4-fluorobenzeneboronic acid, Pd(PPh3)4, and K2CO3 were stirred in
      PhMe/Me2CHOH/H2O to give 15% 2,4'-difluoro-N-(5-methylthiazol-2-yl)-1,1'-
      biphenyl-4-sulfonamide.  In a screen for inhibition of Candida albicans
      logarithmic phase growth, title compds. showed IC50's of as low as 0.0005
      .mu.M.
IT    782475-59-6
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (prepn. of (iso)thiazole benzenesulfonamides and other heterocycles as
         inhibitors of fungal invasion)
RN    782475-59-6  CAPLUS
CN    Piperazine, 1-(diphenylmethyl)-4-[[1-(1-oxobutyl)-2-pyrrolidinyl]carbonyl]-
       (9CI)  (CA INDEX NAME)
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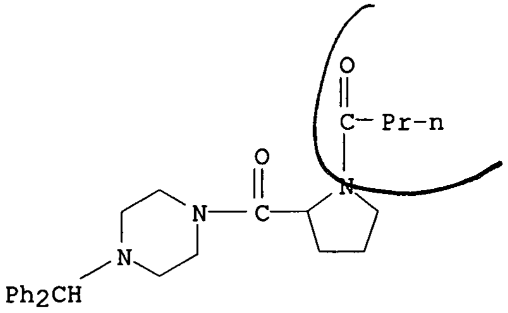

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L6   ANSWER 7 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:780675  CAPLUS
DN   141:296034
TI   Preparation of phthalazinones as PARP inhibitors
IN   Martin, Niall Morrison Barr; Smith, Graeme Cameron Murray; Jackson,
     Stephen Philip; Loh, Vincent M., Jr.; Cockcroft, Xiao-Ling Fan; Matthews,
     Ian Timothy Williams; Menear, Keith Allan; Kerrigan, Frank; Ashworth, Alan
PA   Kudos Pharmaceuticals Limited, UK; Maybridge Limited
SO   PCT Int. Appl., 102 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2004080976        A1    20040923    WO 2004-GB1059          20040312
     WO 2004080976        C1    20060105
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     AU 2004220321        A1    20040923    AU 2004-220321          20040312
     CA 2517629           AA    20040923    CA 2004-2517629         20040312
     GB 2415430           A1    20051228    GB 2005-20754           20040312
     BR 2004008284        A     20060307    BR 2004-8284            20040312
     EP 1633724           A1    20060315    EP 2004-720068          20040312
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     CN 1788000           A     20060614    CN 2004-80012878        20040312
     NO 2005004625        A     20051111    NO 2005-4625            20051007
PRAI GB 2003-5681         A     20030312
     US 2003-454995P      P     20030314
     US 2003-493399P      P     20030806
     US 2003-526244P      P     20031201
     WO 2004-GB1059       A     20040312
OS   MARPAT 141:296034
GI
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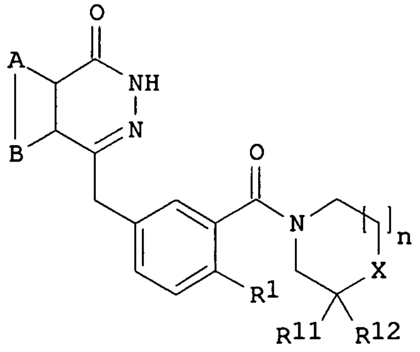

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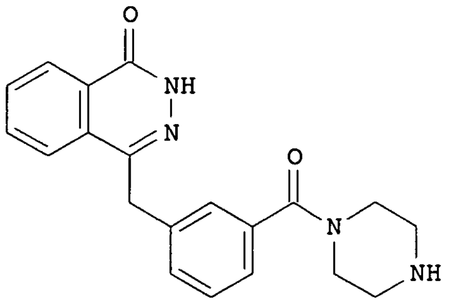


II

AB The title compds. [I; A and B together represent (un)substituted fused arom. ring; X = NRx or CRxRy; if X= NRx then n = 1 or 2 and if X = CRxRy then n = 1; Rx = H, (un)substituted C1-20 alkyl, C5-20 aryl, C3-20 heterocyclyl, amido, thioamido, ester, acyl, and sulfonyl groups; Ry = H, OH, NH2; or Rx and Ry may together form a spiro(C3-7)cycloalkyl or heterocyclyl group; R11 and R12 are both H, or when X = CRxRy, R11, R12, Rx and Ry, together with the carbon atoms to which they are attached, may form (un)substituted fused arom. ring; R1 = H, halo], were prepd. Thus, reacting 3-(4-oxo-3,4-dihydrophthalazin-1-ylmethyl)benzoic acid (prepn. given) with tert-Bu 1-piperazinecarboxylate afforded 77% II which had IC50 of < 0.02 .mu.M against PARP. All compds. I tested had a IC50 of < 0.1 .mu.M in the PARP assay. The pharmaceutical compn. comprising the compd. I is claimed.

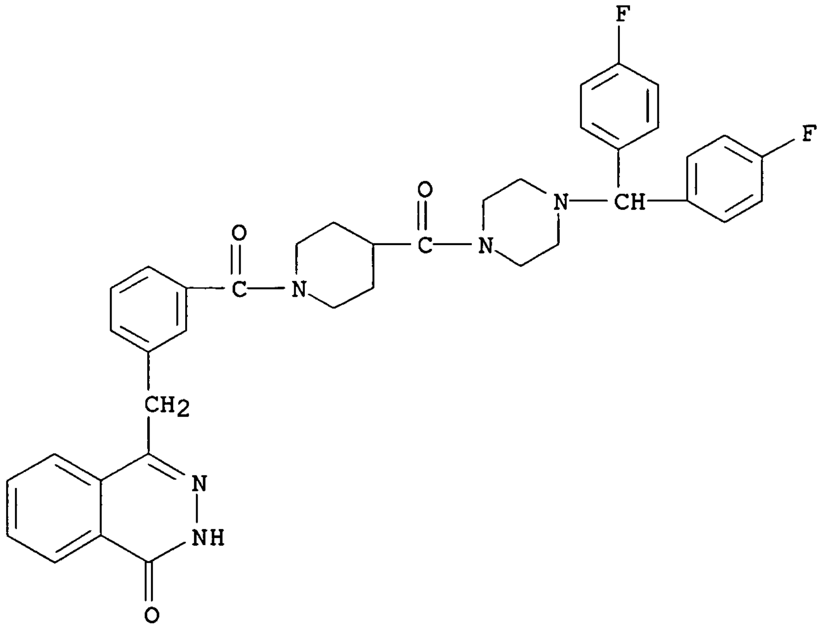
IT **763112-09-0P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phthalazinones as PARP inhibitors)

RN 763112-09-0 CAPLUS

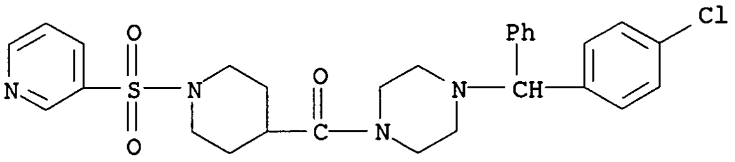
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[1-[3-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]benzoyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



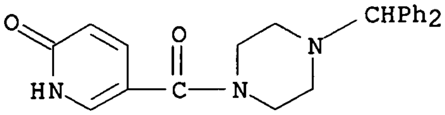
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:742260 CAPLUS
DN 142:273789
TI Synthesis, structure, and properties of a number of 3-sulfanilamidic derivatives of pyridine
AU Solov'ev, M. Yu.; Filimonov, S. I.; Skorenko, A. V.; Ivanenkov, Ya. A.; Balakin, K. B.; Dorogov, M. V.
CS Yaroslav. Gos. Pedagog. Univ. im. K. D. Ushinskogo, Russia
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (2004), 47(2), 28-36
CODEN: IVUKAR; ISSN: 0579-2991
PB Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet
DT Journal
LA Russian
AB 3-Pyridinesulfochloride was synthesized by the dehydroxochloration of 3-pyridinesulfonic acid and used for the synthesis of a no. of primary and secondary sulfonylamides and also (3-pyridinesulfonyl)-pyperidinecarboxylic acids and their amides NMR 1H-spectra of the synthesized compds. are described and interpreted. The rating of their potential suitability for biol. tests is carried out according to Lipinski rules and "lead-like"-conception. Also, the rating of ability of the received compds. to penetrate through the hemato-encephalic barrier was made using the special neuron-net model. The conclusion about the expediency of testing of the synthesized compds. is made for the area of development of CNS acting drugs.
IT **847401-94-9P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., structure, and properties of 3-sulfanilamidic derivs. of pyridine)

RN 847401-94-9 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[[1-(3-pyridinylsulfonyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:511760 CAPLUS
DN 141:420344
TI Neuroprotection of hydroxynicotinyl amide 18 against lipid peroxidation and memory impairment
AU Vajragupta, Opa; Monthakantirat, Orawan; Boonchoong, Preecha; Watanabe, Hiroshi; Peungvicha, Penchom
CS Department of Pharmaceutical Chemistry and Department of Physiology, Faculty of Pharmacy, Mahidol University, Bangkok, 10400, Thailand
SO Warasan Phesatchasat (2002), 29(1-2), 33-43
CODEN: VPSADN; ISSN: 0125-1570
PB Mahidol University, Faculty of Pharmacy
DT Journal
LA English
AB Hydroxynicotinyl amide 18, a novel radical-scavenging agent, was developed for neuroprotection. 18 Showed substantial ex vivo inhibitory action against lipid peroxidn. in mice brain regardless of low in vitro inhibition. These indicated that 18 effectively reached the brain, the target site. ESR verified the scavenging ability of 18 by showing suppression of the HO.cntdot. and O2.cntdot.- radicals resulting in the decrease of signal areas of PBN/OH and DMPO/OOH, resp. Neuropharmacol. of 18 was investigated in mice in comparison with chroman amide 12P, a potent neuroprotective-radical scavenger. 18 At 100 mg/kg, i.p. was the promising compd. as it showed significant suppression (18.16%) on the hypermotility induced by methamphetamine (MAP), but did not reduce locomotor activity in normal condition as 12P did. The suppression demonstrated the enhancement of brain delivery and the antagonism against aberrant dopamine release. In water maze test, 18 (100 mg/kg, i.p.) as well as 12P (200 mg/kg) and tacrine (3 mg/kg), significantly reduced the learning and memory impairment induced by scopolamine (0.5 mg/kg), 18 was more potent than 12P. These results support the enhanced brain delivery of 18 as well as provide addnl. evidence for the role of radical scavenger in the modulation of brain neurotransmitters in the aberrant condition.
IT **794524-22-4P**
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hydroxynicotinyl amide 18 showed substantial ex vivo antilipid peroxidn., but low in vitro inhibition, had radical scavenging activity, suppressed MAP-induced hypermotility and reduced scopolamine-induced cognitive deficits in mouse)
RN 794524-22-4 CAPLUS
CN Piperazine, 1-[(1,6-dihydro-6-oxo-3-pyridinyl)carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



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RE.CNT  39     THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 10 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:308416  CAPLUS
DN   140:339339
TI   Preparation of piperidinylcarbonylpiperazines for treatment of
     neurological diseases
IN   Lauffer, David J.; Botfield, Martyn C.; Eckard, Ottow        Apps
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 56 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
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PI   WO 2004031148        A1     20040415    WO 2003-US31080        20031002
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2500672           AA     20040415    CA 2003-2500672        20031002
     AU 2003299145        A1     20040423    AU 2003-299145         20031002
     US 2004180880        A1     20040916    US 2003-677631         20031002
     EP 1546103           A1     20050629    EP 2003-756899         20031002
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1717390           A      20060104    CN 2003-80104172       20031002
     JP 2006504717        T2     20060209    JP 2004-541991         20031002
     NO 2005002153        A      20050531    NO 2005-2153           20050502
PRAI US 2002-416134P      P      20021003
     WO 2003-US31080      W      20031002
OS   MARPAT 140:339339
GI
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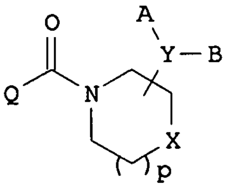


I

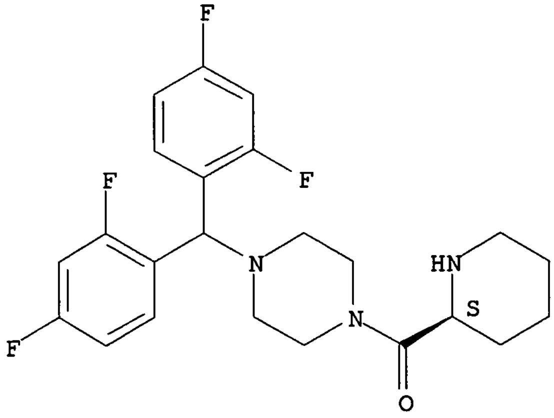
AB Title compds. [I; Q = 3-7 membered (substituted) (unsatd.) N-heterocyclyl; X = C(R2)2, N, NR2, O, S, SO, SO2; Y = bond, O, (O-, S-, SO-, SO2-, CO-, imino-interrupted) alkyl, alkenyl, alkynyl; p = 0-2; A, B = null, H, (substituted) (hetero)aryl; R2 = H, alkyl, alkenyl, alkynyl], were prepd. Thus, pivaloyl chloride was added dropwise to (S)-1-tert-butoxycarbonyl-2-piperidinecarboxylic acid and Et3N in CH2Cl2 over 1 h followed by stirring for 2 h; 1-[bis(3,4-difluorophenyl)methyl]piperazine (prepn. given) in CH2Cl2 was added over 2 h followed by stirring overnight to give 80% 2-[4-[bis(3,4-difluorophenyl)methyl]piperazine-1-carbonyl]piperidine-1-carboxylic acid tert-Bu ester. The latter was treated with CF3CO2H in CH2Cl2 to give [4-[bis(3,4-difluorophenyl)methyl]piperazin-1-yl]piperidin-2-ylmethanone. The latter inhibited NMDA-induced neuroexcitotoxic injury to rat embryo mesencephalic cell suspensions with IC50 = 6 nM.

IT **678969-68-1P 678969-69-2P 678969-70-5P**
681006-47-3P 681006-48-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperidinylcarbonylpiperazines for treatment of neurol. diseases)

RN 678969-68-1 CAPLUS

CN Piperazine, 1-[bis(2,4-difluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

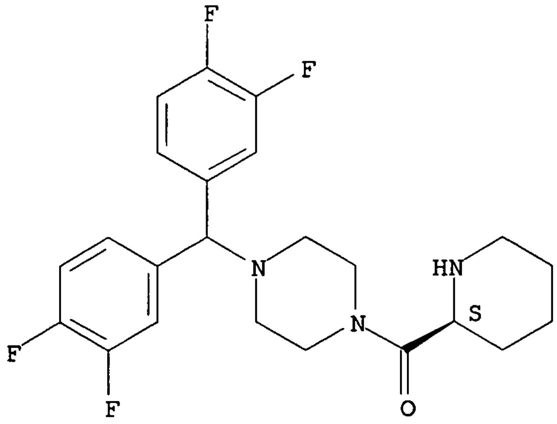
Absolute stereochemistry. Rotation (-).



RN 678969-69-2 CAPLUS

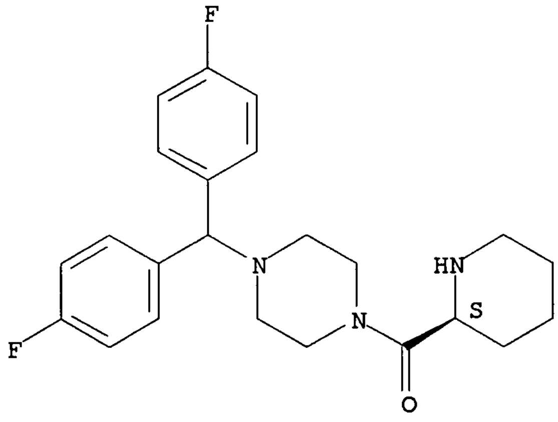
CN Piperazine, 1-[bis(3,4-difluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 678969-70-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

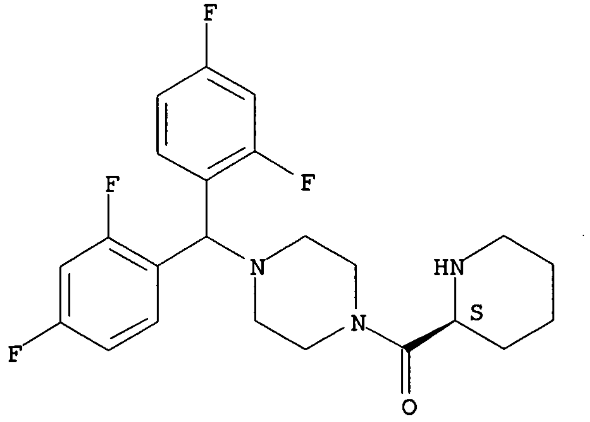
Absolute stereochemistry.



●2 HCl

RN 681006-47-3 CAPLUS
CN Piperazine, 1-[bis(2,4-difluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

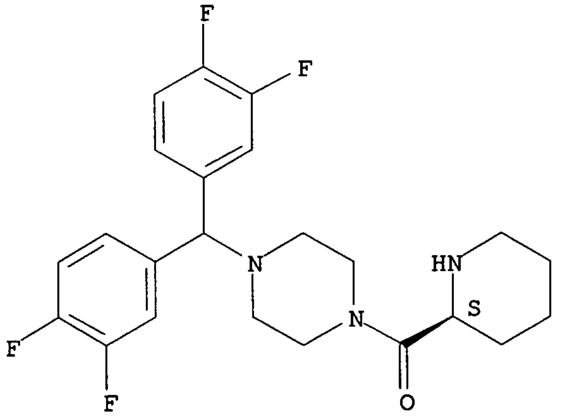
Absolute stereochemistry. Rotation (-).



●2 HCl

RN 681006-48-4 CAPLUS
CN Piperazine, 1-[bis(3,4-difluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

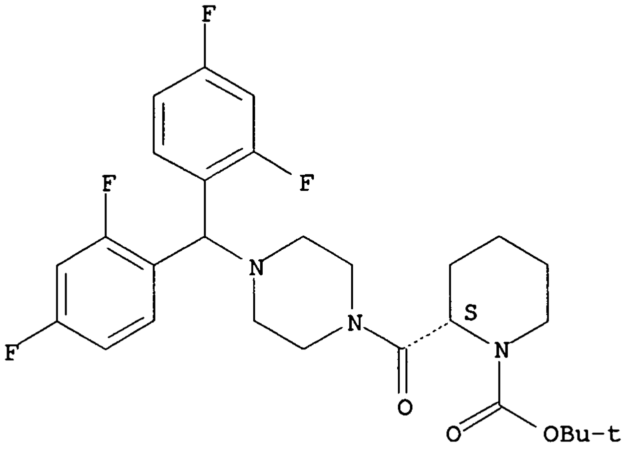
Absolute stereochemistry. Rotation (-).



●2 HCl

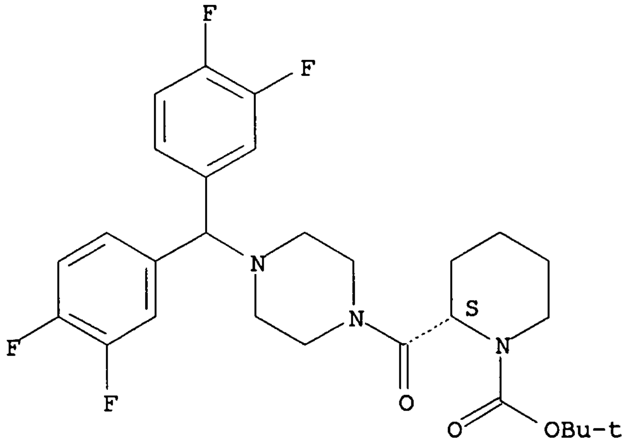
IT **678969-71-6P 678969-74-9P 678969-75-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of piperidinylcarbonylpiperazines for treatment of neurol. diseases)
RN 678969-71-6 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[[4-[bis(2,4-difluorophenyl)methyl]-1-piperazinyl]carbonyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



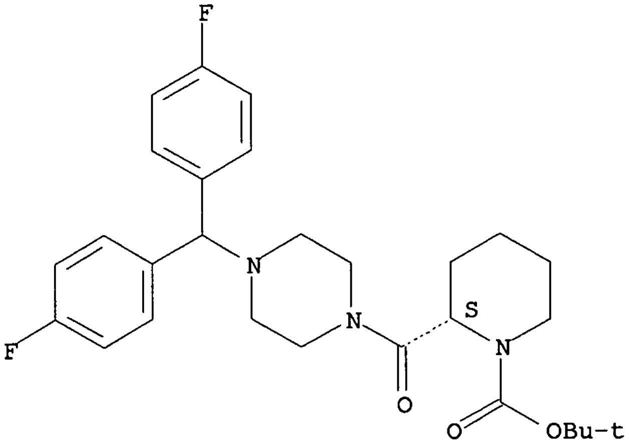
RN 678969-74-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[[4-[bis(3,4-difluorophenyl)methyl]-1-piperazinyl]carbonyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 678969-75-0 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]carbonyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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RE.CNT  7      THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 11 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:142804  CAPLUS
DN   140:199333
TI   Preparation of piperazine and piperidine derivatives for treating or
     preventing neuronal damage or to stimulate nerve growth
IN   Tomlinson, Ronald; Lauffer, David; Mullican, Michael
PA   USA
SO   U.S. Pat. Appl. Publ., 46 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
     ---------------     ----    --------    --------------------   --------
PI   US 2004034019        A1     20040219    US 2002-214906         20020808
PRAI US 2002-214906              20020808
OS   MARPAT 140:199333
GI
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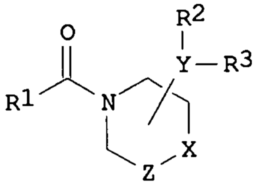

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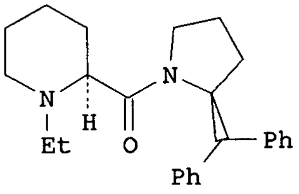

II

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AB   The authors have prepd. a variety of piperidine and piperazine derivs. I
     [R1 = (un)satd. monocycle, bicycle, tricycle; R2, R3 = independently H,
     Ar, none, Ar = (un)substituted Ph, 1-naphthyl, pyrazinyl, indolyl, etc.; X
     = C(R4)2, N, N(R4), O, S, SO, SO2, R4 = independently H, alkyl, alkenyl,
     alkynyl; Y = O, alkyl, alkenyl, alkynyl; Z = (CH2)n, n = 0, 1, 2] that are
     useful for treating or preventing neuronal damage, particularly damage
```
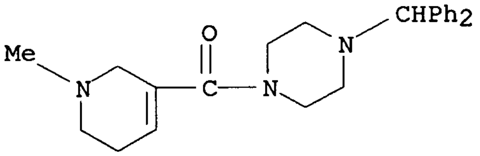

assocd. with neurol. diseases. Thus, the pyrrolidinylpiperidine II was prepd. by reacting 1-ethyl-(2S)-piperidine-2-carboxylic acid with (S)-2-(1,1-diphenylmethyl)pyrrolidine. In a neuroprotection assay, II displayed an EC50(nM) greater than 500. The invention also provides pharmaceutical compns. comprising the compds. and methods of utilizing those compns. for treating or preventing neuronal damage or for stimulating nerve growth.

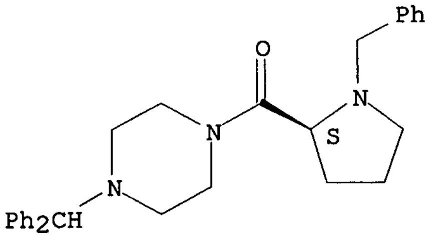
IT **518051-10-0 518051-11-1 518051-12-2**
518051-13-3
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of piperidine and piperazine derivs. and use for treating or preventing neuronal damage or to stimulate nerve growth)

RN 518051-10-0 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(1,2,5,6-tetrahydro-1-methyl-3-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



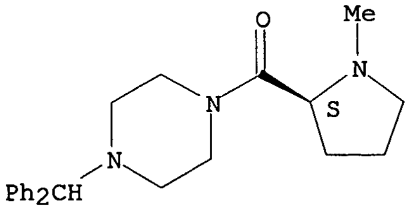
RN 518051-11-1 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



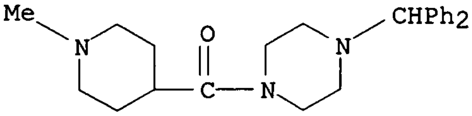
RN 518051-12-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 518051-13-3 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(1-methyl-4-piperidinyl)carbonyl]- (9CI)

(CA INDEX NAME)

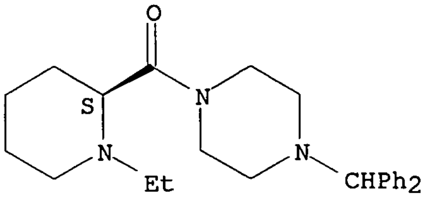


IT **354563-61-4P 354563-66-9P**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of piperidine and piperazine derivs. and use for treating or preventing neuronal damage or to stimulate nerve growth)

RN 354563-61-4 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

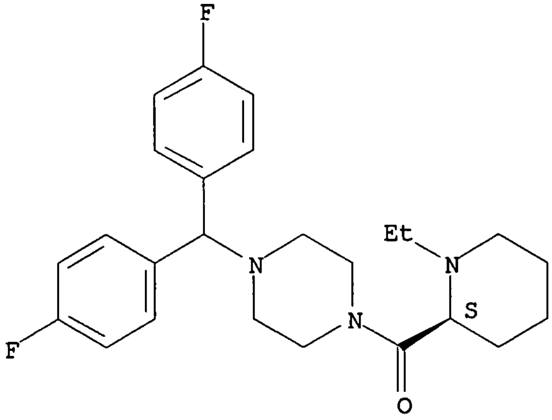
Absolute stereochemistry.



RN 354563-66-9 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **354563-62-5P 354563-68-1P 354563-70-5P**
354563-84-1P 354563-86-3P 354563-87-4P
354563-96-5P 354563-97-6P 354564-16-2P
354564-48-0P 354564-51-5P 354564-55-9P

354564-57-1P 354564-59-3P 354564-60-6P
354564-61-7P 354564-62-8P 354564-63-9P
354564-64-0P 354564-66-2P 354564-68-4P
354564-70-8P 354564-71-9P 354564-81-1P
354564-85-5P 354564-87-7P 354564-91-3P
354564-93-5P 354564-95-7P 354564-97-9P
354564-98-0P 518051-28-0P 661452-44-4P
661452-47-7P 661452-48-8P 661452-49-9P
661452-50-2P 661452-51-3P 661452-52-4P
661452-57-9P 661452-60-4P

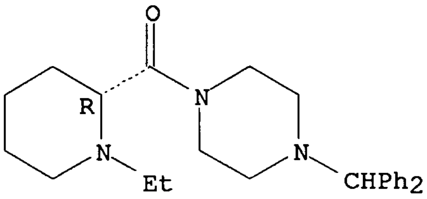
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidine and piperazine derivs. and use for treating or preventing neuronal damage or to stimulate nerve growth)

RN 354563-62-5 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

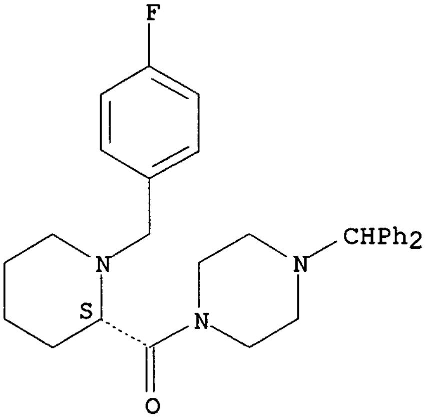
Absolute stereochemistry.



RN 354563-68-1 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

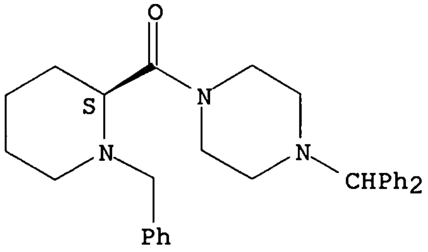
Absolute stereochemistry.



RN 354563-70-5 CAPLUS

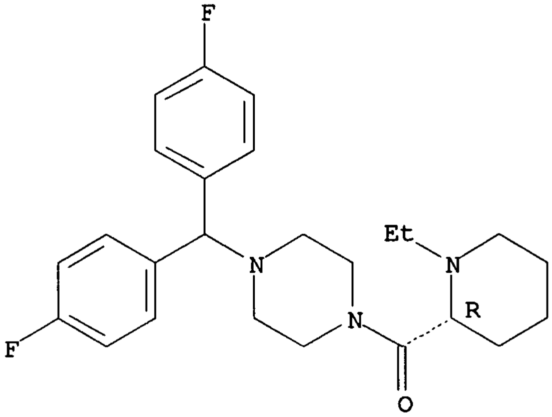
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



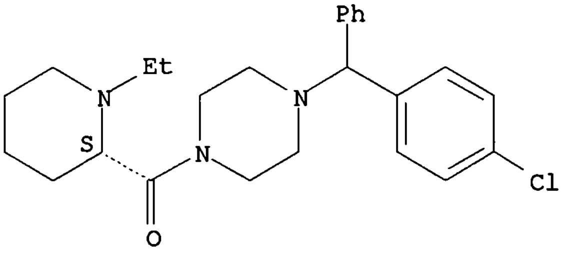
RN 354563-84-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354563-86-3 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

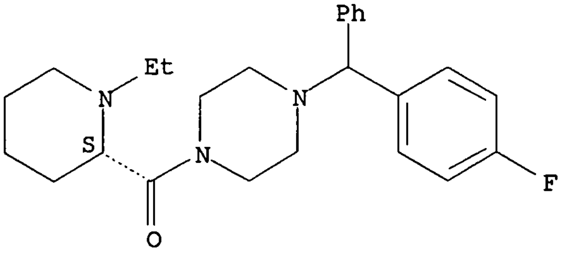


●2 HCl

RN 354563-87-4 CAPLUS
CN Piperazine, 1-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-4-[(4-

fluorophenyl)phenylmethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

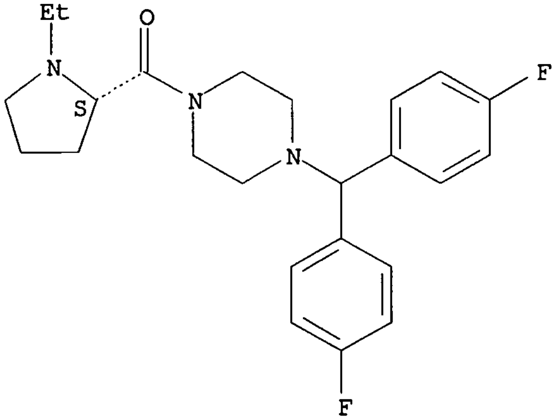
Absolute stereochemistry.



●2 HCl

RN 354563-96-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

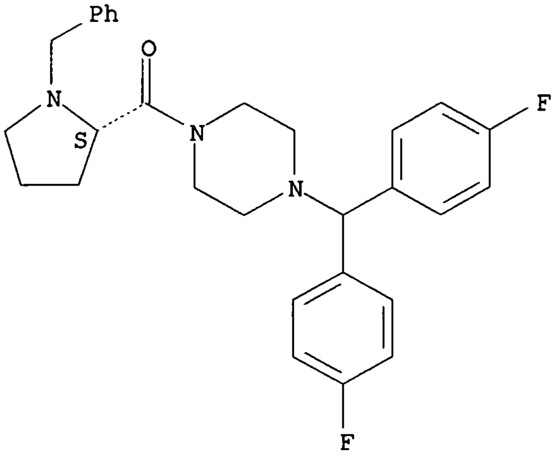
Absolute stereochemistry.



●2 HCl

RN 354563-97-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

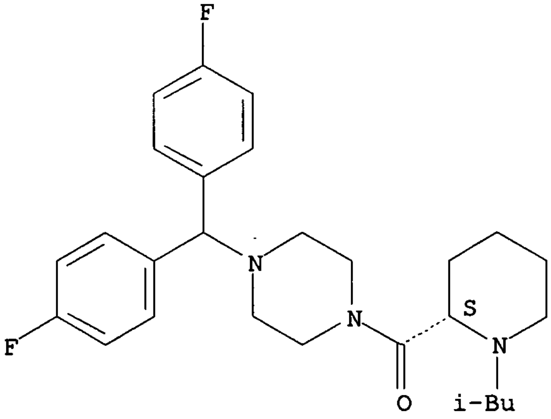


●2 HCl

RN 354564-16-2 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-methylpropyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

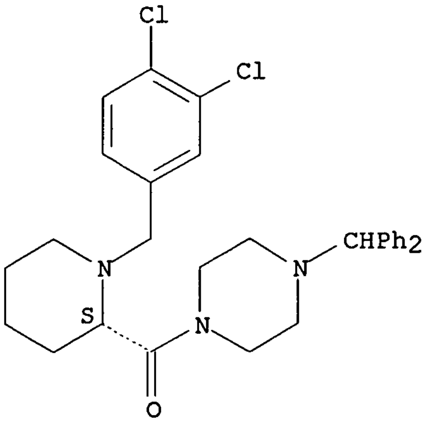
Absolute stereochemistry.



RN 354564-48-0 CAPLUS

CN Piperazine, 1-[[(2S)-1-[(3,4-dichlorophenyl)methyl]-2-piperidinyl]carbonyl]-4-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

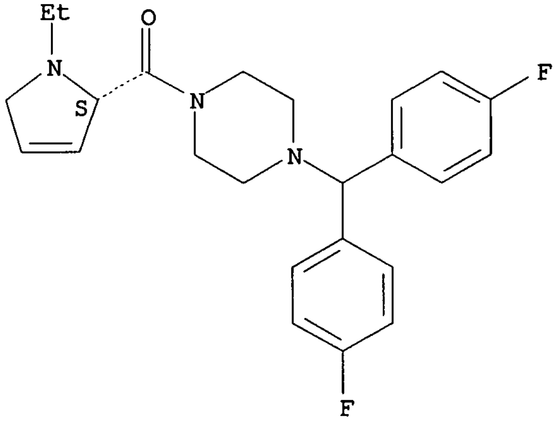
Absolute stereochemistry.



●2 HCl

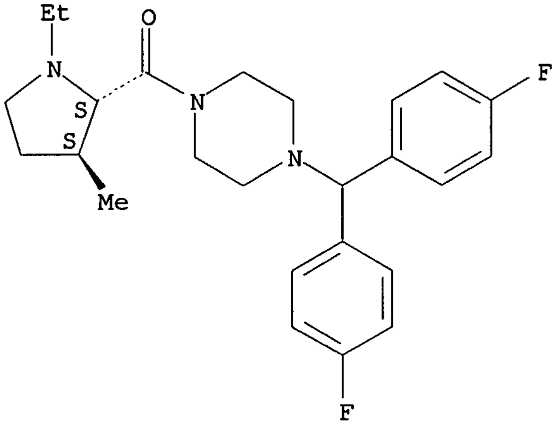
RN 354564-51-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2,5-dihydro-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



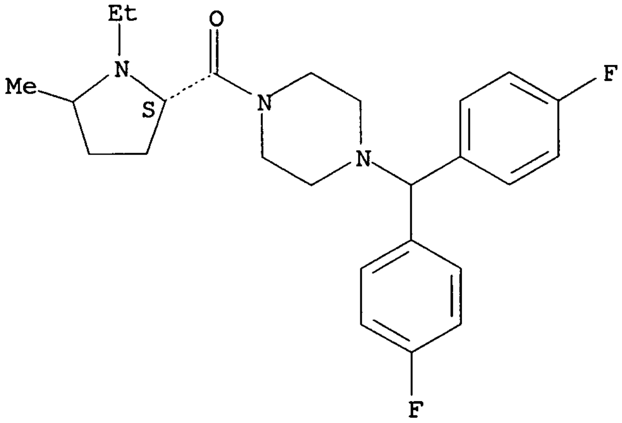
RN 354564-55-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



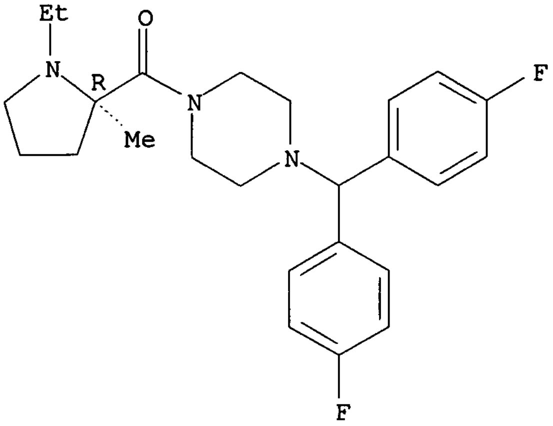
RN 354564-57-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-5-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



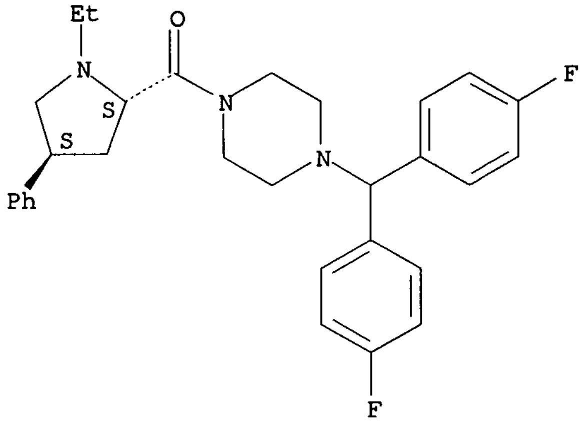
RN 354564-59-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



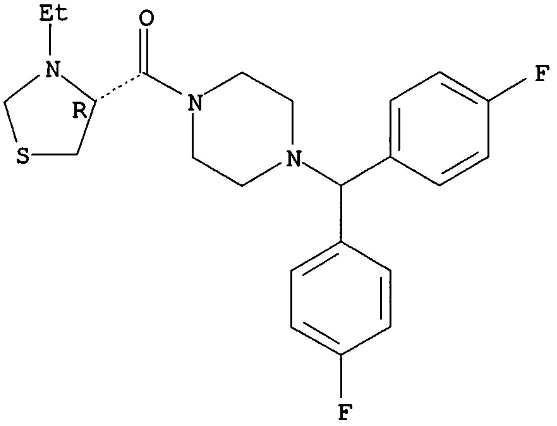
RN 354564-60-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-ethyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



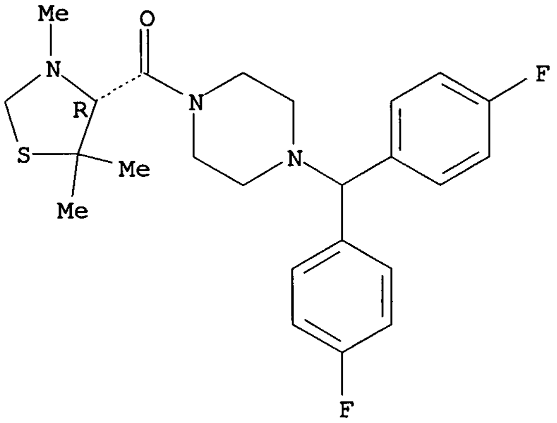
RN 354564-61-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3-ethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



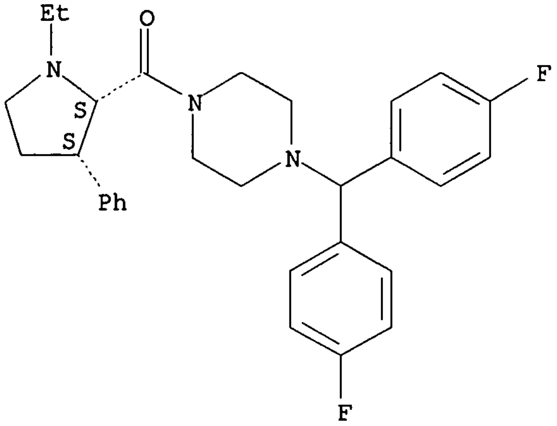
RN 354564-62-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3,5,5-trimethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

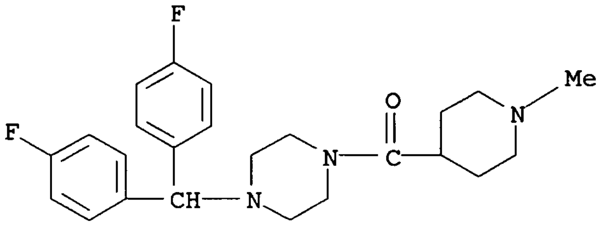


RN 354564-63-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

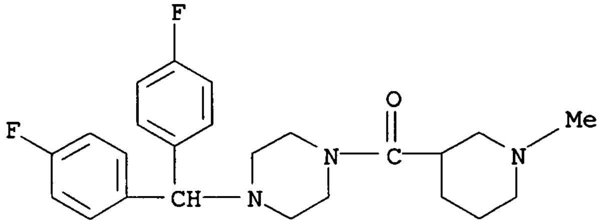
Absolute stereochemistry.



RN 354564-64-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-4-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)

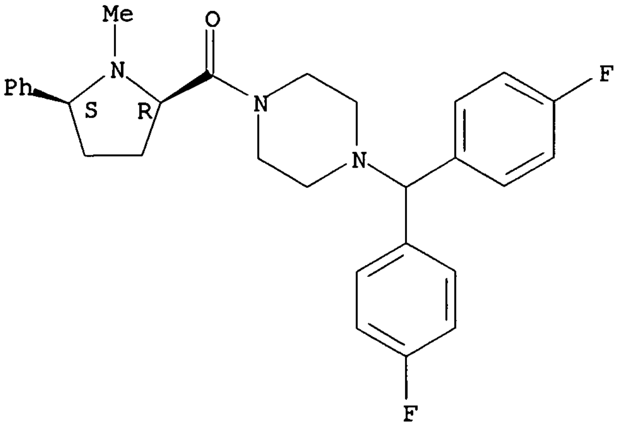


RN 354564-66-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-3-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)



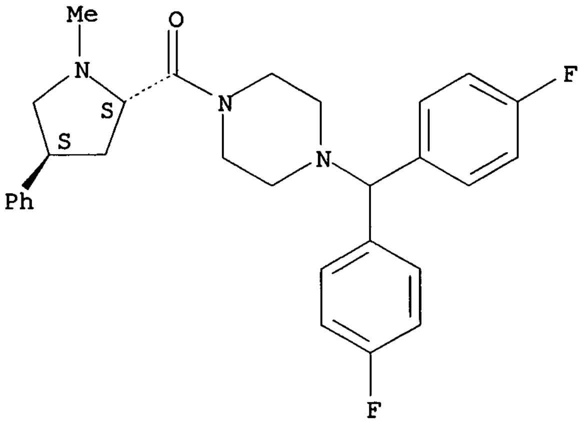
RN 354564-68-4 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-1-methyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



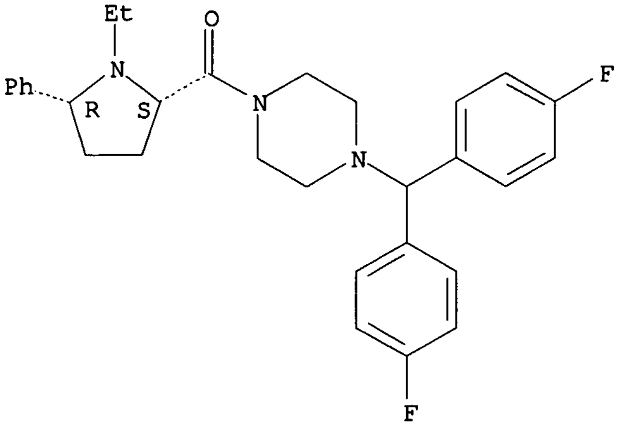
RN 354564-70-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-methyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-71-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

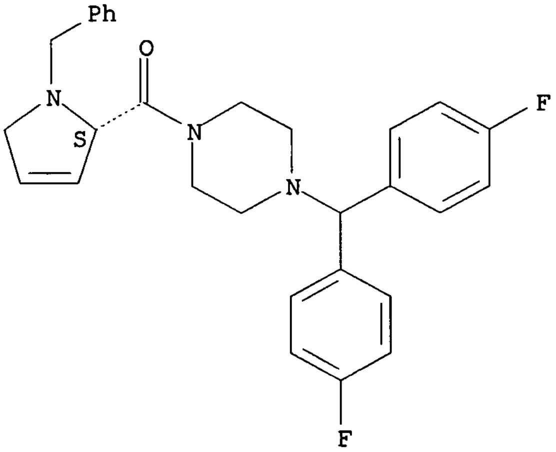
Absolute stereochemistry.



RN 354564-81-1 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-2,5-dihydro-1-(phenylmethyl)-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

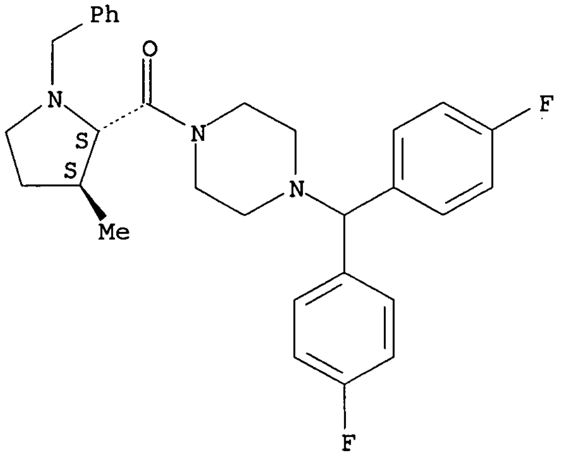
Absolute stereochemistry.



RN 354564-85-5 CAPLUS

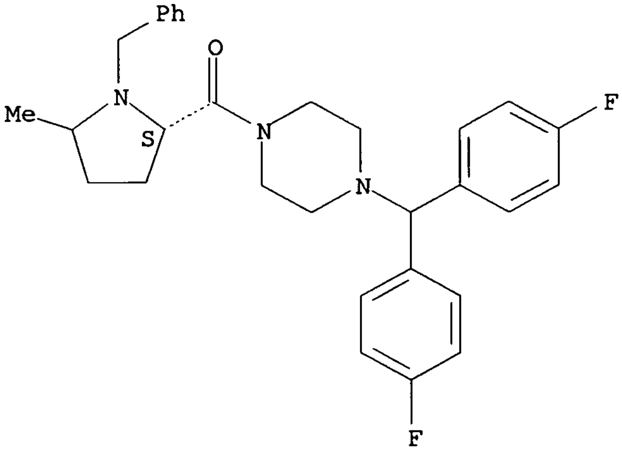
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



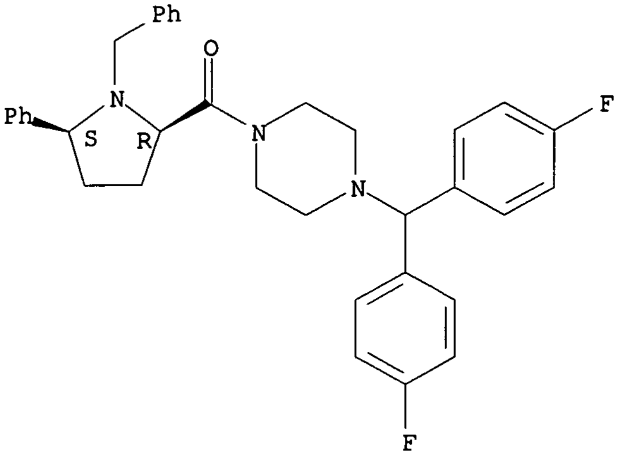
RN 354564-87-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-5-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



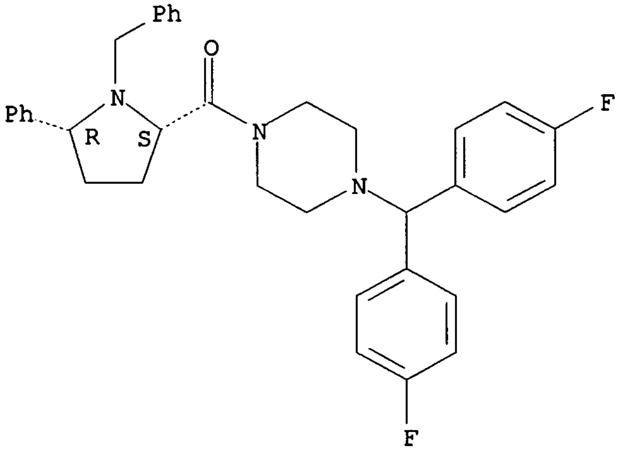
RN 354564-91-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



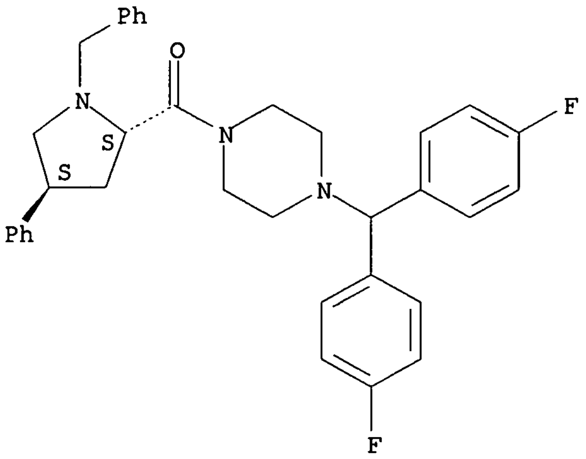
RN 354564-93-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



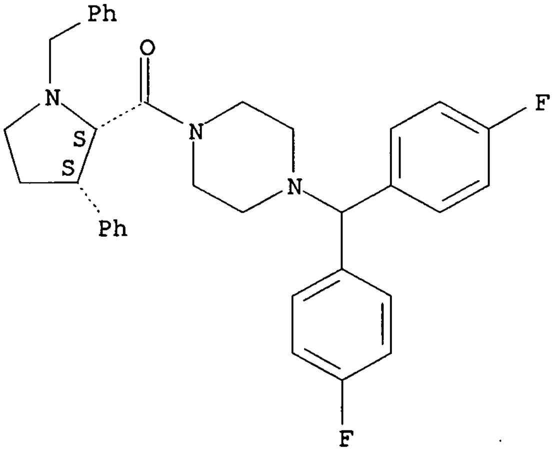
RN 354564-95-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-4-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



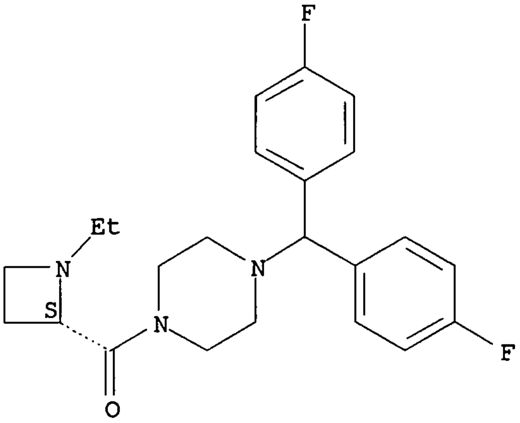
RN 354564-97-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-98-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-azetidinyl]carbonyl]- (9CI) (CA INDEX NAME)

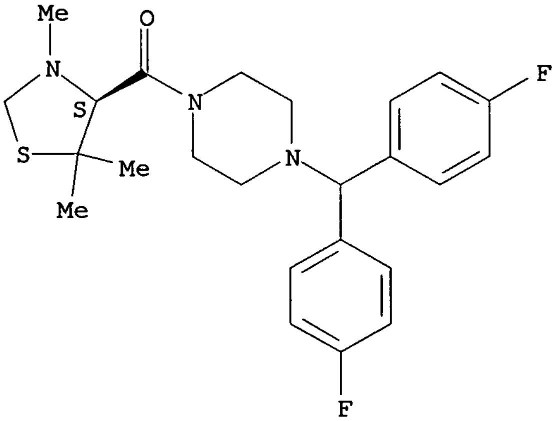
Absolute stereochemistry.



RN 518051-28-0 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4S)-3,5,5-trimethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

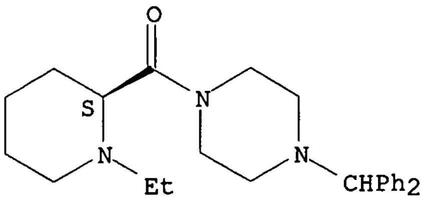
Absolute stereochemistry.



RN 661452-44-4 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

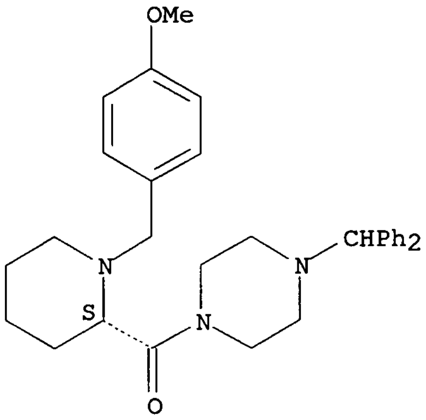
Absolute stereochemistry.



● HCl

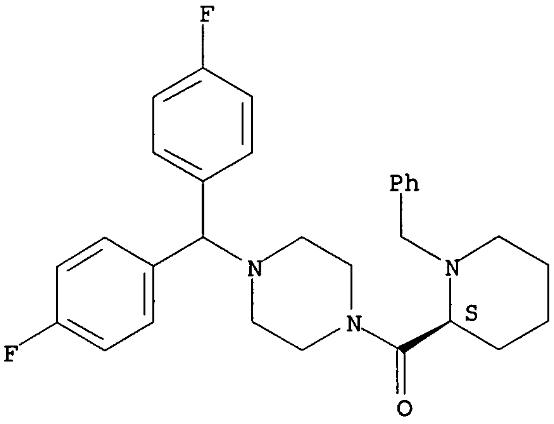
RN 661452-47-7 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-methoxyphenyl)methyl]-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 661452-48-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN   661452-49-9 CAPLUS
CN   Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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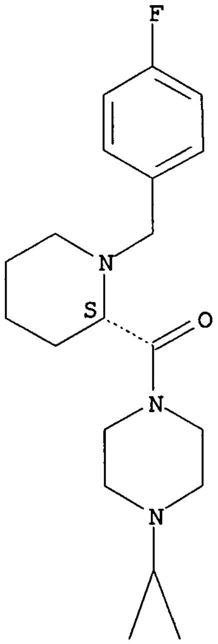

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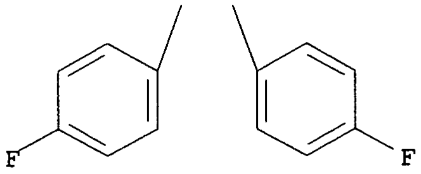
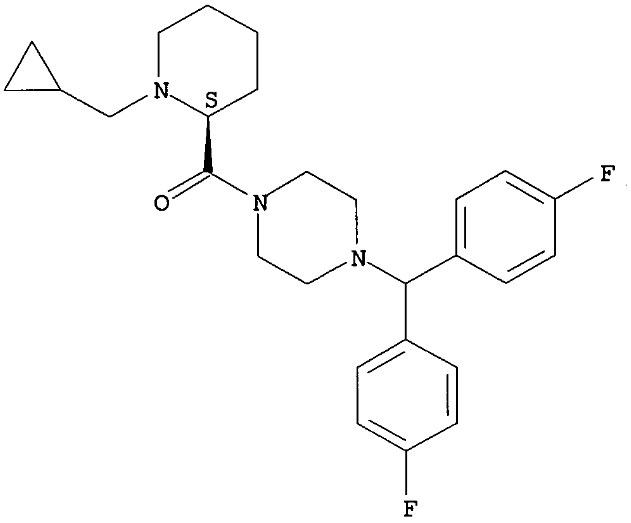


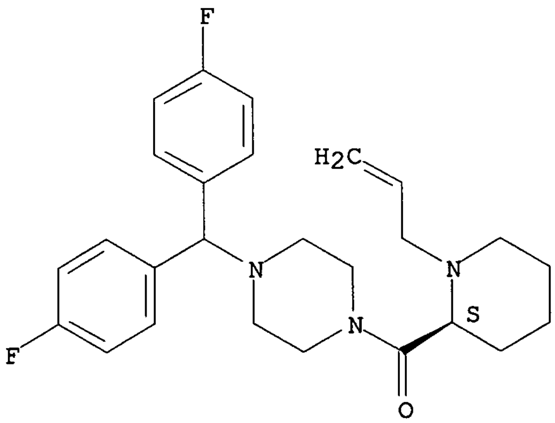
RN 661452-50-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(cyclopropylmethyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



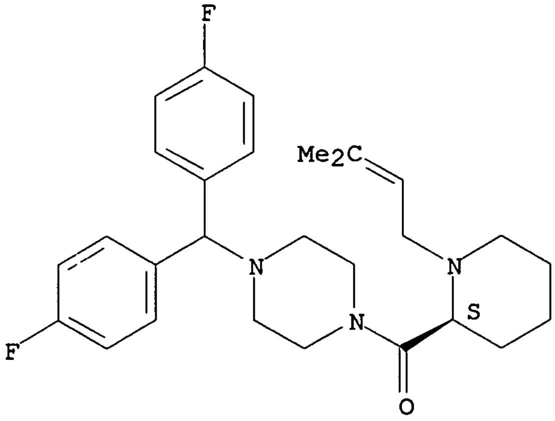
RN 661452-51-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-propenyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



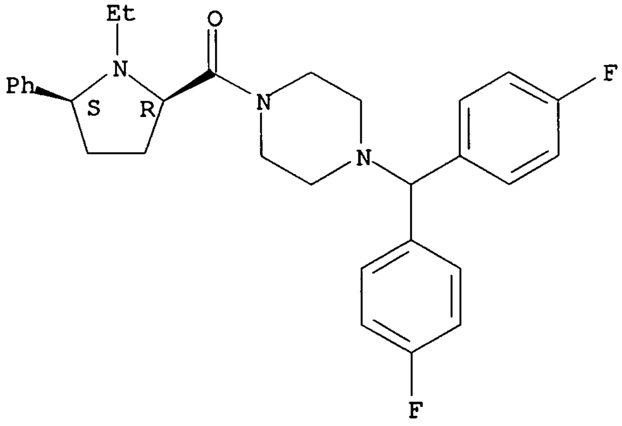
RN 661452-52-4 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3-methyl-2-butenyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

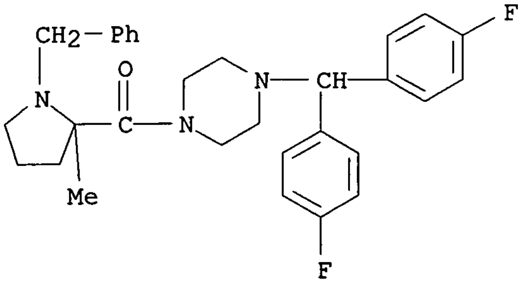


RN 661452-57-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



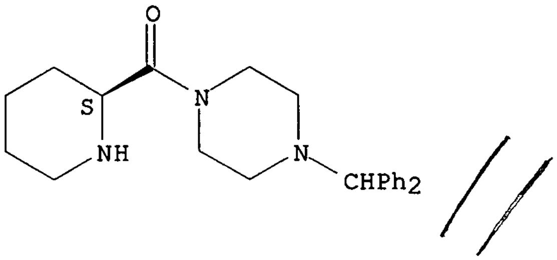
RN 661452-60-4 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[2-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)



IT **354563-69-2 354564-09-3 354564-11-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of piperidine and piperazine derivs. and use for treating or preventing neuronal damage or to stimulate nerve growth)

RN 354563-69-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

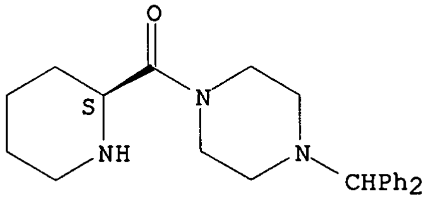
Absolute stereochemistry.



●2 HCl

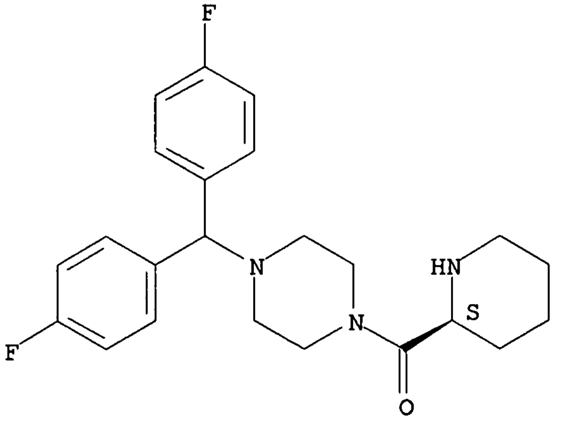
RN 354564-09-3 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-11-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



✓

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L6   ANSWER 12 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2003:356258  CAPLUS
DN   138:348723
TI   Heterocyclic compounds, and preparation thereof, for modulators of the
     cholesterol biosynthetic pathway, and therapeutic use
IN   Botfield, Martyn; Mcdonald, Fiona; Kraetzschmar, Joern; Lindenthal,
     Bernhard; Kreft, Bertold
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 225 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.       DATE
     ---------------     ----   --------   --------------------  --------
PI   WO 2003037338        A2    20030508   WO 2002-US35269       20021101
     WO 2003037338        A3    20031127
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003191110        A1    20031009   US 2002-286416         20021101
     EP 1441728           A2    20040804   EP 2002-802524         20021101
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     JP 2005511560        T2    20050428   JP 2003-539682         20021101
PRAI US 2001-344485P      P     20011101
     WO 2002-US35269      W     20021101
OS   MARPAT 138:348723
AB   The invention discloses methods for modulating the cholesterol
     biosynthetic pathway.  The level of cholesterol in the body is linked to
     numerous pathol. states.  The methods of the invention alter the
     transcription levels of genes involved in the cholesterol biosynthesis.
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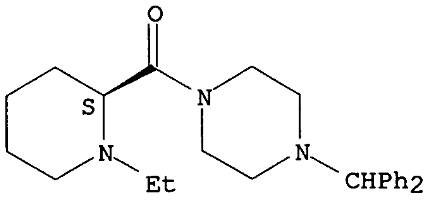
The methods of the invention can used for treating diseases mediated by the cholesterol biosynthetic pathway. Prepn. of compds., e.g. 1-[(S)-2-(1,1-diphenylmethyl)pyrrolidin-1-yl]-1-[(S)-1-ethylpiperidin-2-yl]methanone, is included.

IT **354563-61-4P**
RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)

RN 354563-61-4 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

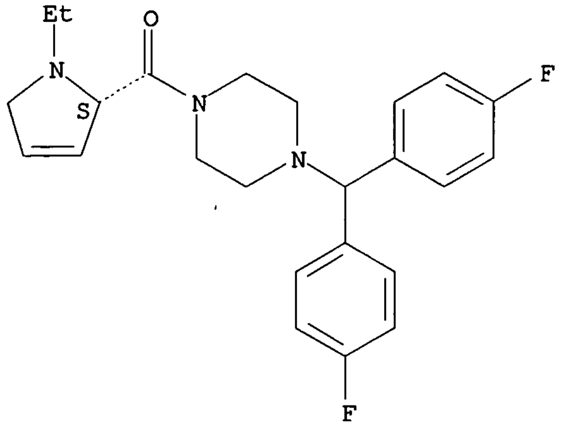


IT **354564-51-5P 354564-55-9P 354564-57-1P**
354564-58-2P 354564-59-3P 354564-60-6P
354564-61-7P 354564-62-8P 354564-63-9P
354564-64-0P 354564-66-2P 354564-68-4P
354564-70-8P 354564-71-9P 354564-81-1P
354564-85-5P 354564-87-7P 354564-89-9P
354564-91-3P 354564-93-5P 354564-95-7P
354564-97-9P 354564-98-0P 518051-10-0P
518051-11-1P 518051-12-2P 518051-13-3P
518051-28-0P
RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)

RN 354564-51-5 CAPLUS

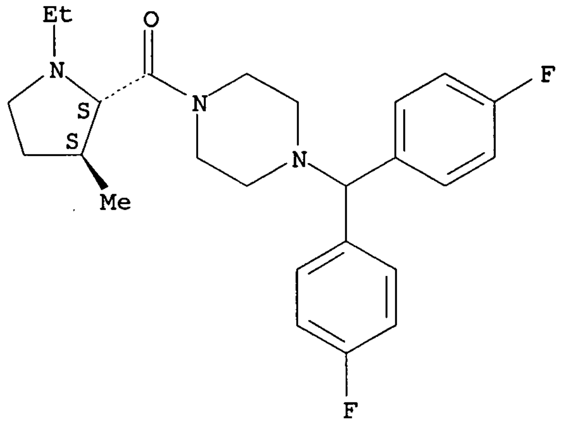
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2,5-dihydro-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



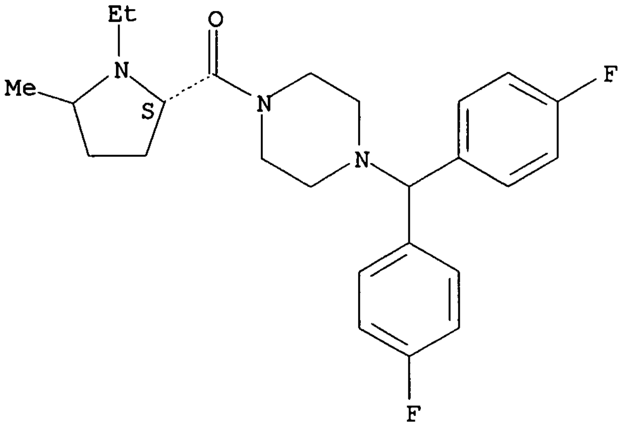
RN 354564-55-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



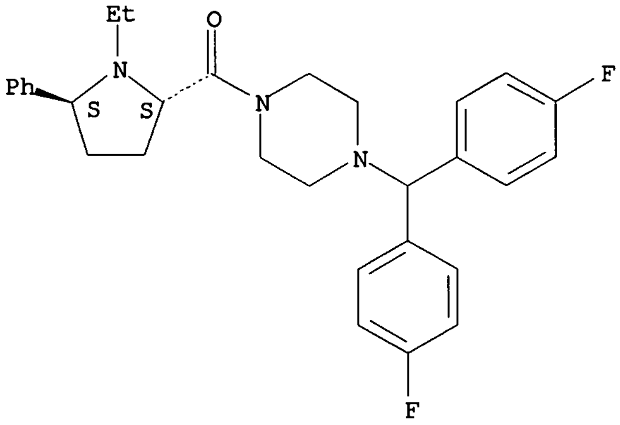
RN 354564-57-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-5-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



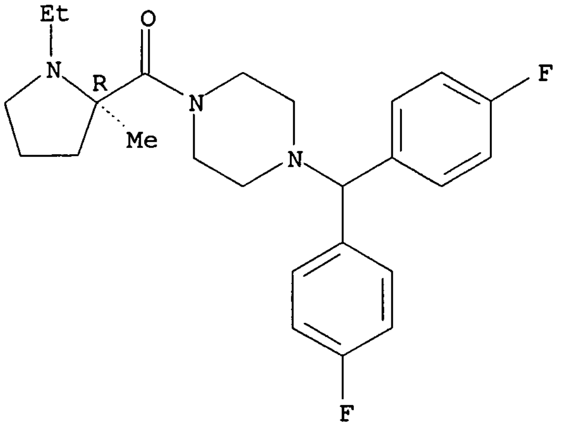
RN 354564-58-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5S)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



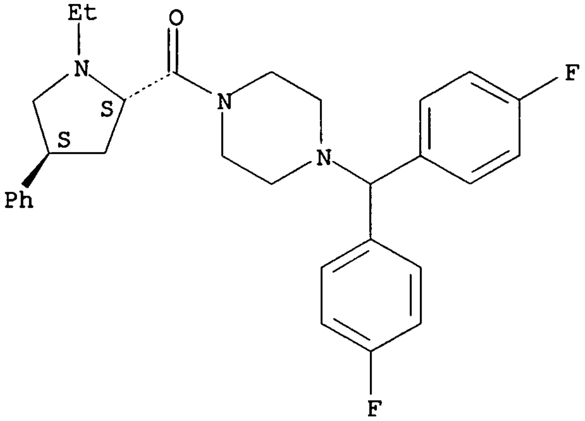
RN 354564-59-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



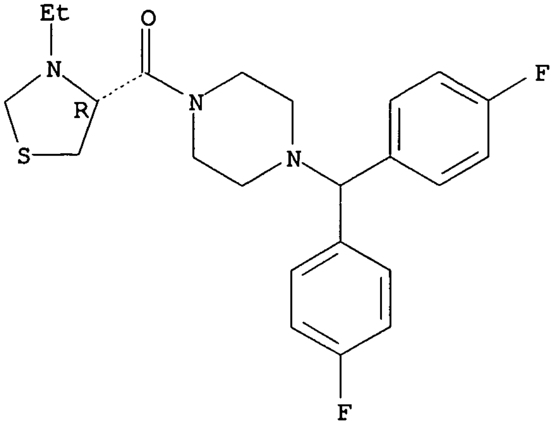
RN 354564-60-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-ethyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



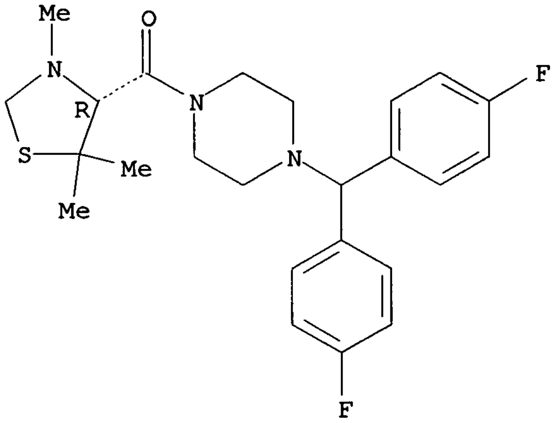
RN 354564-61-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3-ethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



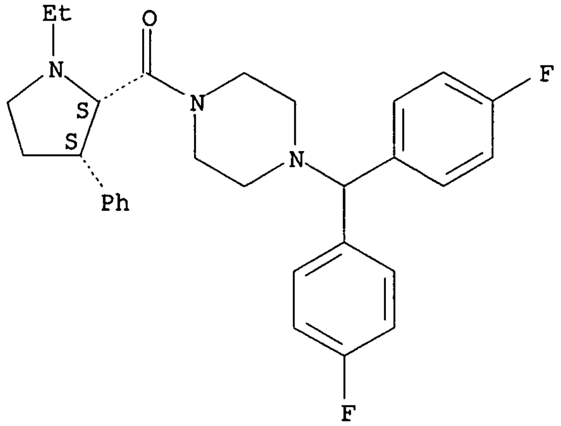
RN 354564-62-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3,5,5-trimethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

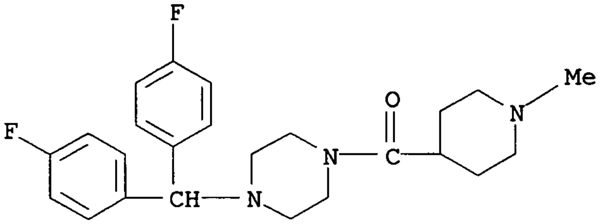


RN 354564-63-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

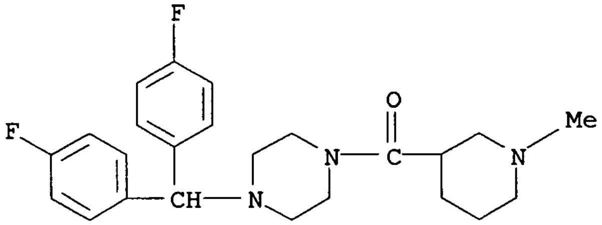
Absolute stereochemistry.



RN 354564-64-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-4-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)

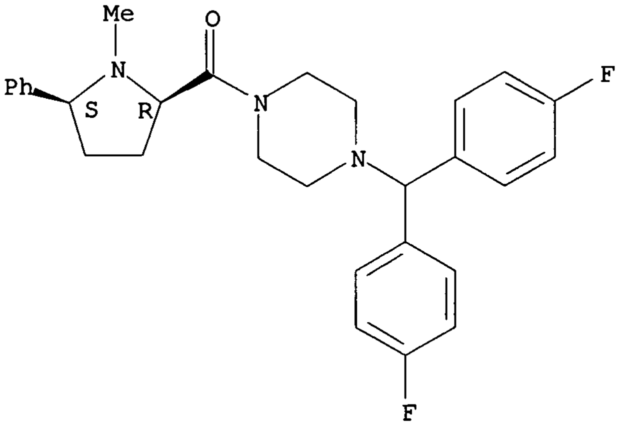


RN 354564-66-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-3-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)



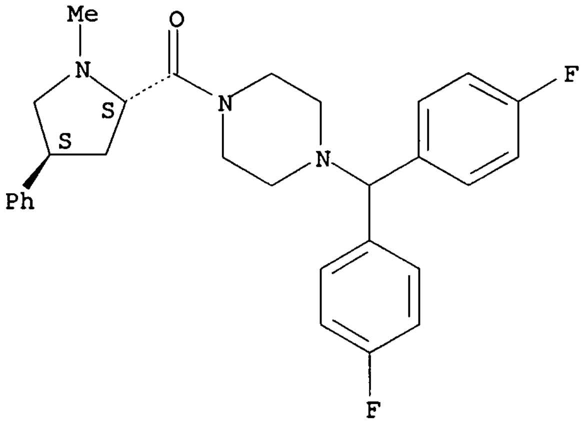
RN 354564-68-4 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-1-methyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



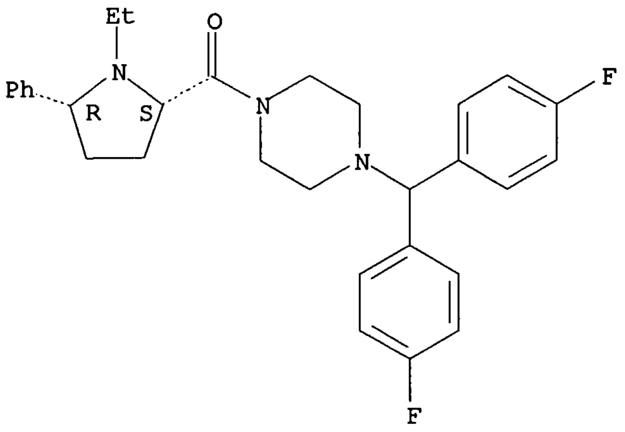
RN 354564-70-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-methyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



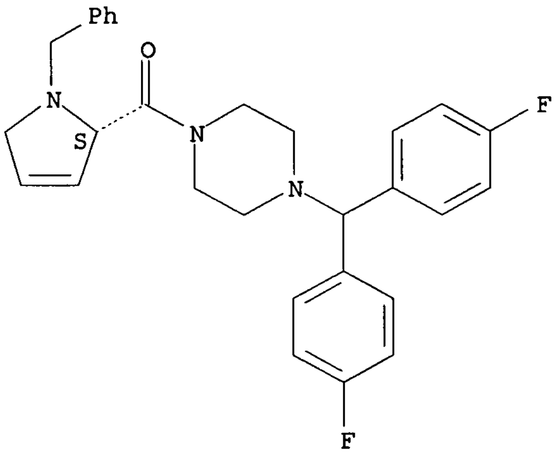
RN 354564-71-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



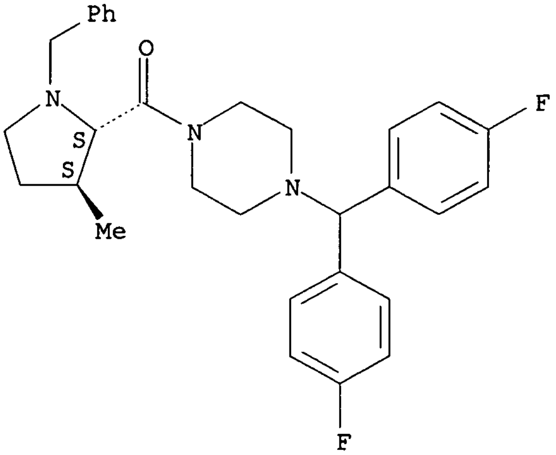
RN 354564-81-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-2,5-dihydro-1-(phenylmethyl)-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



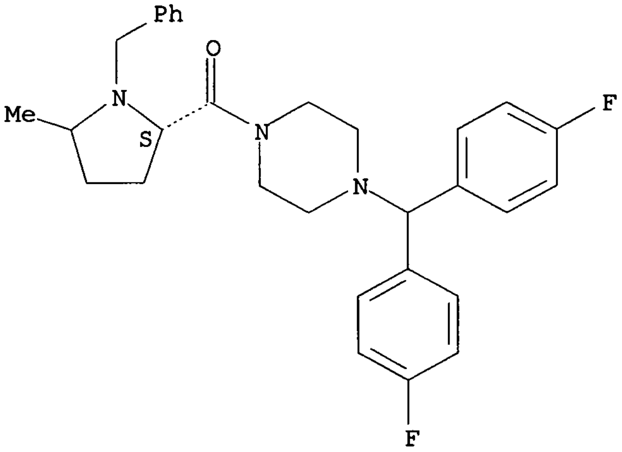
RN 354564-85-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



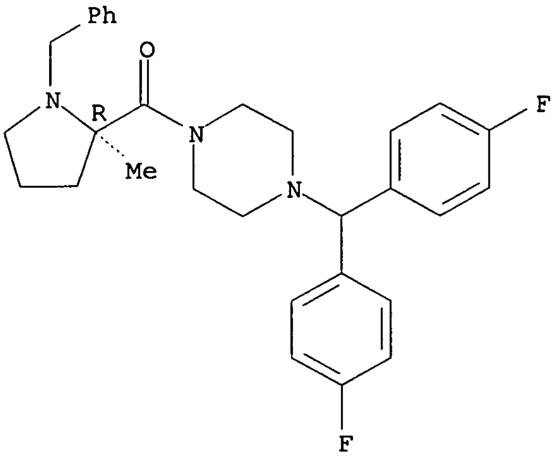
RN 354564-87-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-5-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



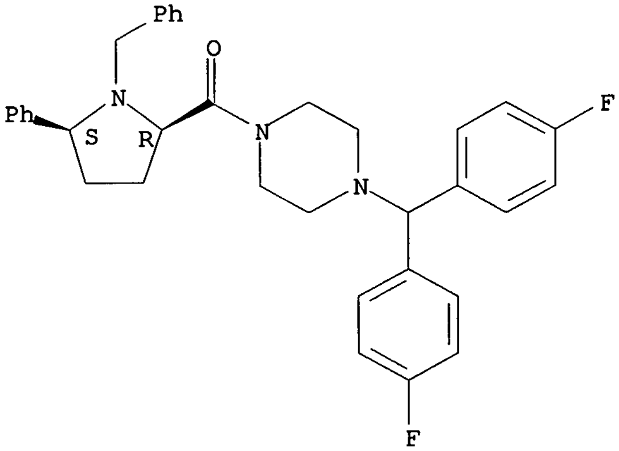
RN 354564-89-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-2-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



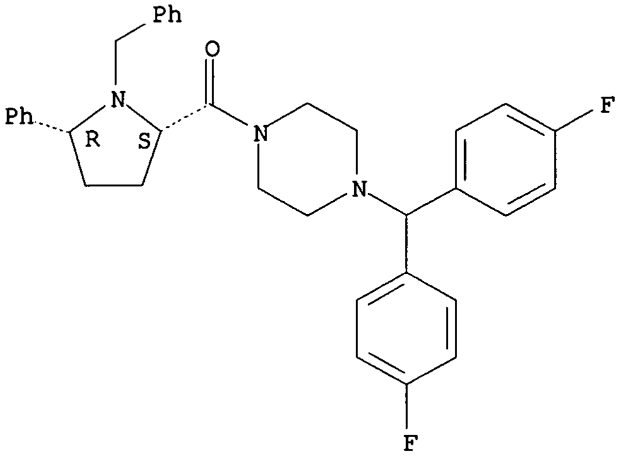
RN 354564-91-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



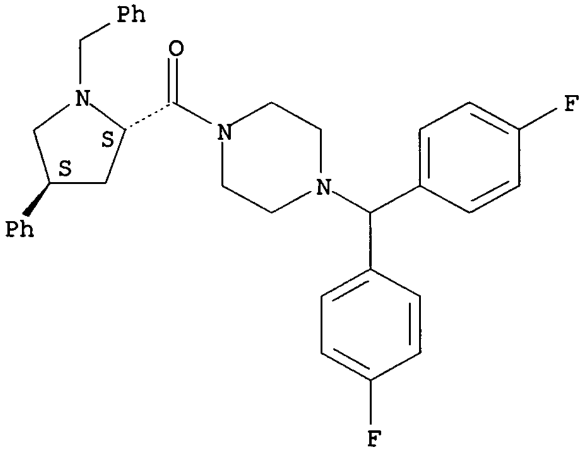
RN 354564-93-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



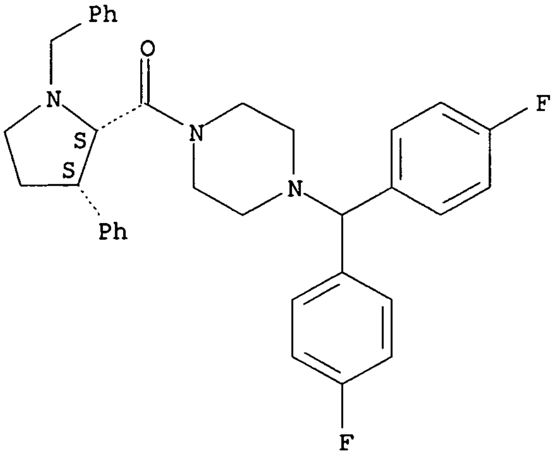
RN 354564-95-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-4-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



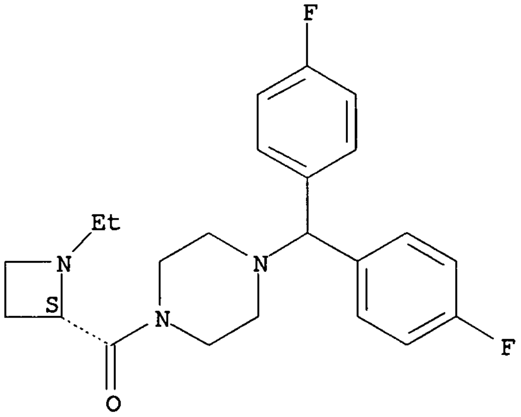
RN 354564-97-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

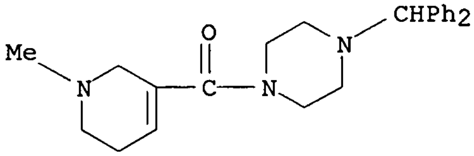


RN 354564-98-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-azetidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

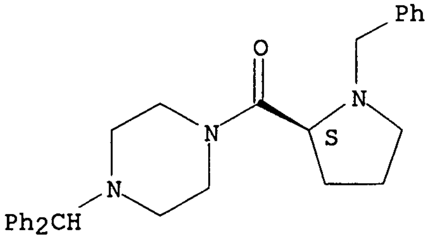


RN 518051-10-0 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(1,2,5,6-tetrahydro-1-methyl-3-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



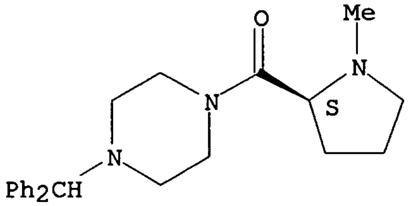
RN 518051-11-1 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

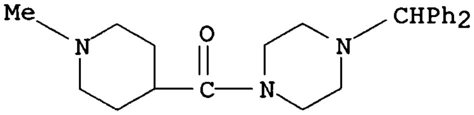


RN 518051-12-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

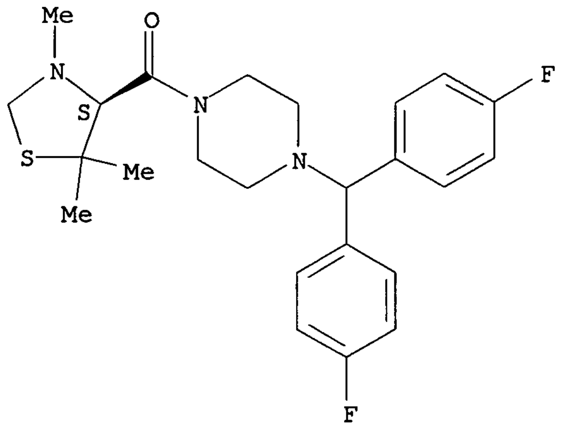


RN 518051-13-3 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(1-methyl-4-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 518051-28-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4S)-3,5,5-trimethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

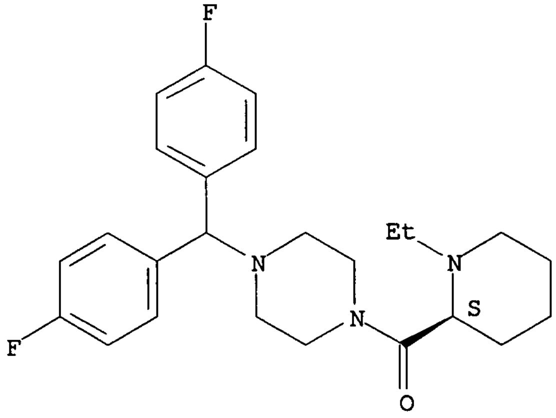


IT **354563-66-9P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)

RN 354563-66-9 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

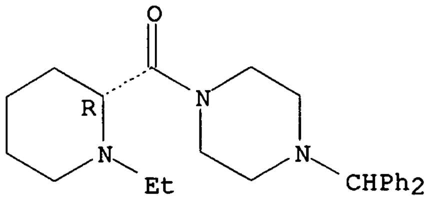
Absolute stereochemistry.



IT **354563-62-5P 354563-68-1P 354563-70-5P**
354563-84-1P 354563-86-3P 354563-87-4P
354563-96-5P 354563-97-6P 354564-08-2P
354564-10-6P 354564-12-8P 354564-13-9P
354564-14-0P 354564-15-1P 354564-16-2P
354564-48-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)

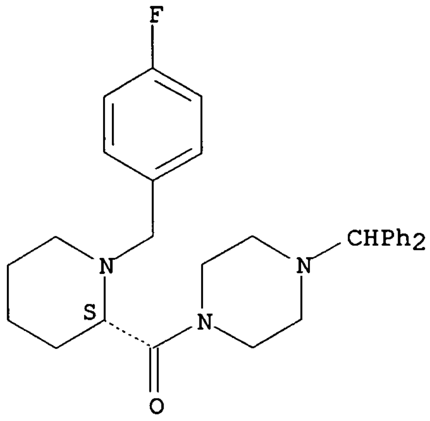
RN 354563-62-5 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



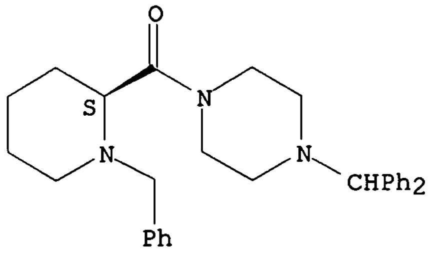
RN 354563-68-1 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



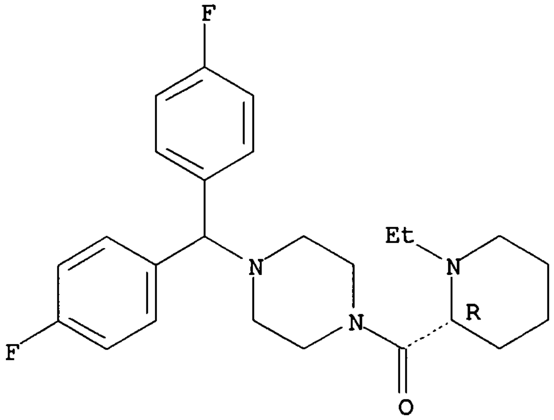
RN 354563-70-5 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



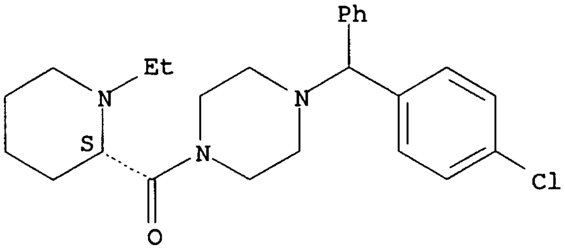
RN 354563-84-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354563-86-3 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

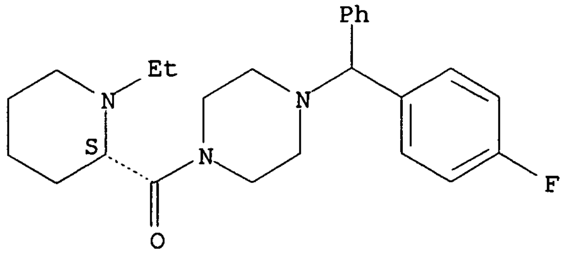
Absolute stereochemistry.



●2 HCl

RN 354563-87-4 CAPLUS
CN Piperazine, 1-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-4-[(4-fluorophenyl)phenylmethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

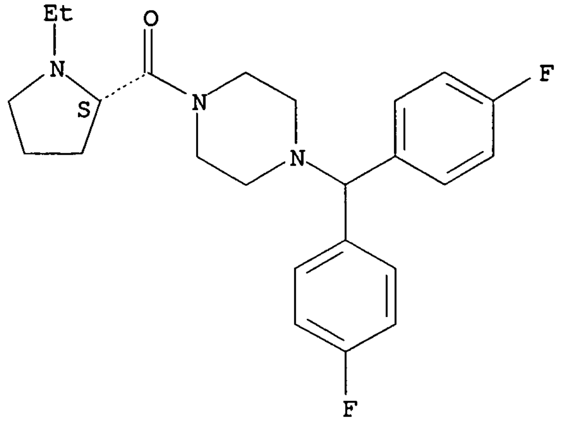
Absolute stereochemistry.



●2 HCl

RN 354563-96-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

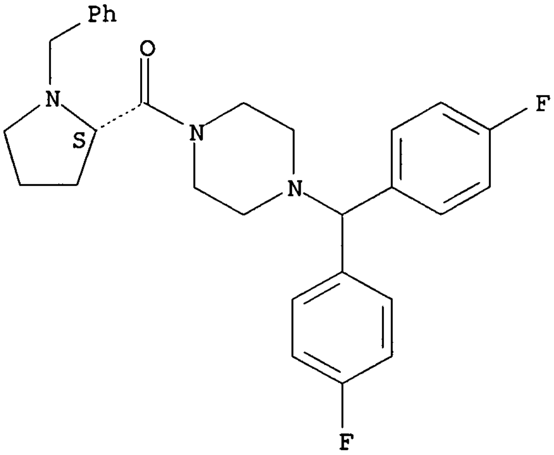
Absolute stereochemistry.



●2 HCl

RN 354563-97-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

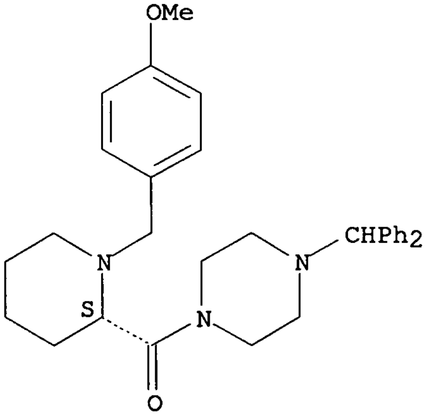
Absolute stereochemistry.



●2 HCl

RN 354564-08-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-methoxyphenyl)methyl]-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

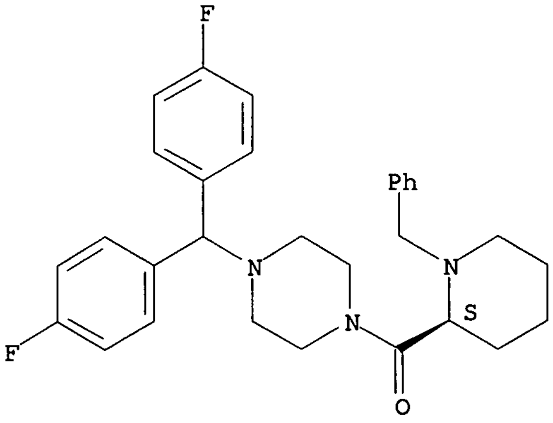
Absolute stereochemistry.



●2 HCl

RN 354564-10-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

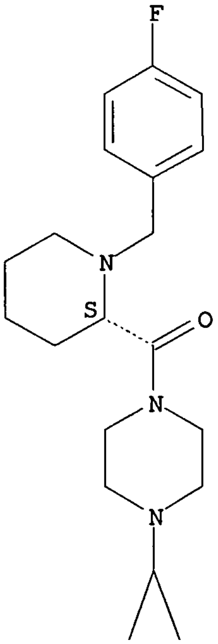


●2 HCl

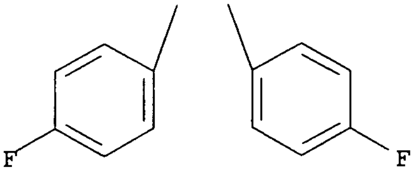
RN 354564-12-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



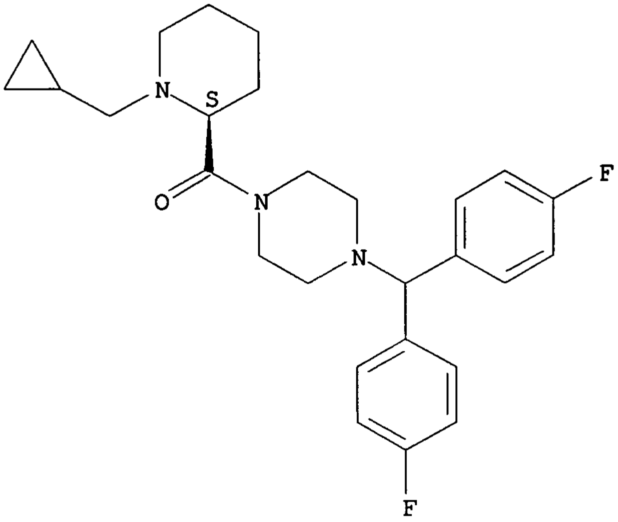
PAGE 2-A



●2 HCl

RN 354564-13-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(cyclopropylmethyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

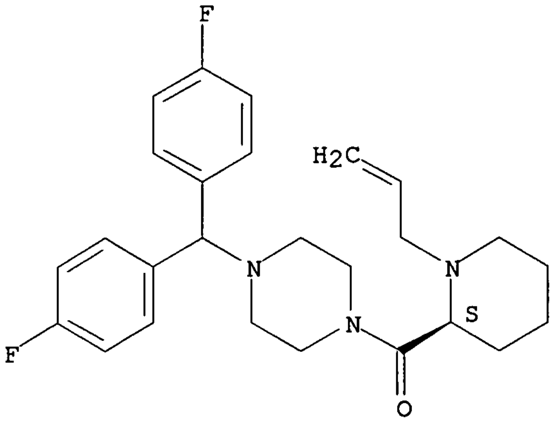
Absolute stereochemistry.



●2 HCl

RN 354564-14-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-propenyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

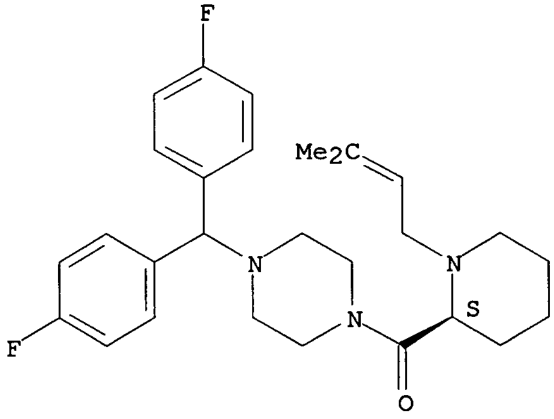
Absolute stereochemistry.



●2 HCl

RN 354564-15-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3-methyl-2-butenyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

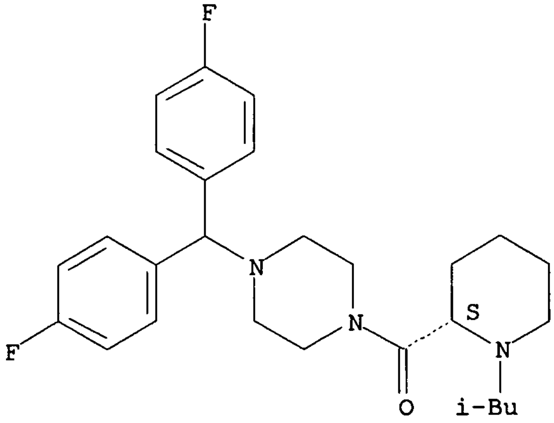
Absolute stereochemistry.



●2 HCl

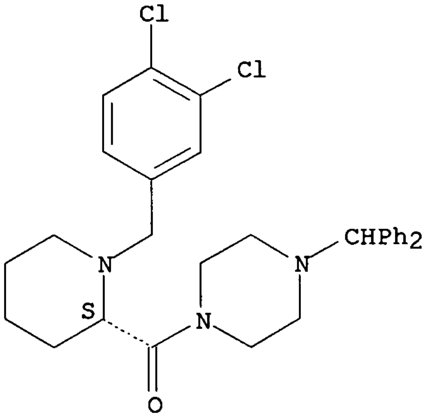
RN 354564-16-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-methylpropyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-48-0 CAPLUS
CN Piperazine, 1-[[(2S)-1-[(3,4-dichlorophenyl)methyl]-2-piperidinyl]carbonyl]-4-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

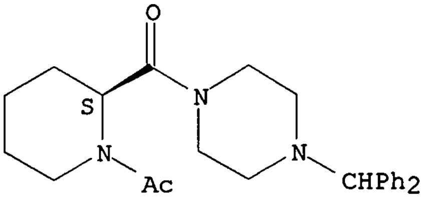
Absolute stereochemistry.



●2 HCl

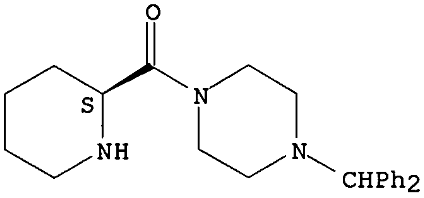
IT **518051-16-6**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)
RN 518051-16-6 CAPLUS
CN Piperazine, 1-[[(2S)-1-acetyl-2-piperidinyl]carbonyl]-4-(diphenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **354563-69-2 354564-09-3 354564-11-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(heterocyclic compd. prepn. for modulator of cholesterol biosynthetic pathway, and therapeutic use)
RN 354563-69-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

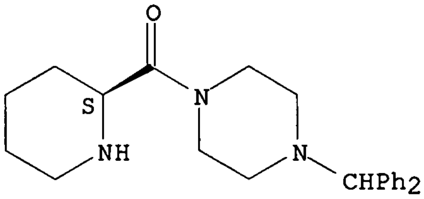
Absolute stereochemistry.



●2 HCl

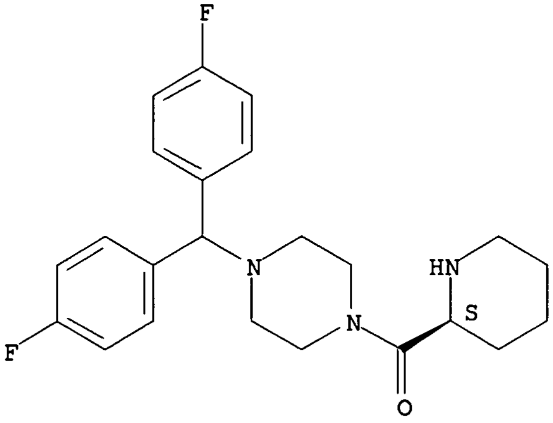
RN 354564-09-3 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-11-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L6   ANSWER 13 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2002:539670  CAPLUS
DN   137:93746
TI   2-Arylimino-2,3-dihydrothiazoles, processes for their preparation, and
     their use as somatostatin receptor ligands
IN   Moinet, Christophe; Sackur, Carole; Thurieau, Christophe
PA   Societe De Conseils De Recherches Et D'applications Scientifiques
     (S.C.R.A.S.), Fr.
SO   PCT Int. Appl., 465 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2002055510        A1    20020718   WO 2002-FR93           20020111
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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     FR 2819508           A1    20020719   FR 2001-396            20010112
     FR 2819508           B1    20050121
     CA 2434203           AA    20020718   CA 2002-2434203        20020111
     EP 1353912           A1    20031022   EP 2002-700318         20020111
     EP 1353912           B1    20050824
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     BR 2002006407        A     20040106   BR 2002-6407           20020111
     JP 2004530643        T2    20041007   JP 2002-556180         20020111
     AT 302765            E     20050915   AT 2002-700318         20020111
     ES 2248514           T3    20060316   ES 2002-2700318        20020111
     NZ 526692            A     20060428   NZ 2002-526692         20020111
     ZA 2003005100        A     20040827   ZA 2003-5100           20030630
     NO 2003003120        A     20030911   NO 2003-3120           20030708
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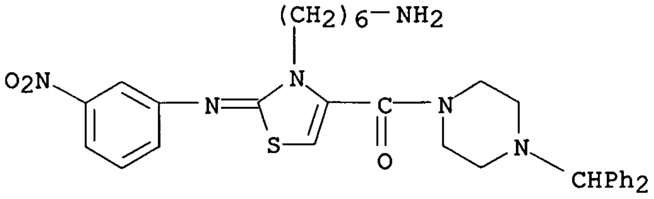
PRAI FR 2001-396 A 20010112
WO 2002-FR93 W 20020111
OS MARPAT 137:93746
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

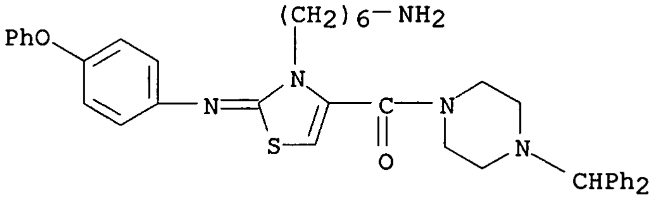
AB The invention concerns novel 2-arylimino-2,3-dihydrothiazole derivs. I and their racemates, enantiomers, combinations, and salts [wherein R1 = (un)substituted, particularly amino-substituted alk(en/yn)yl, (hetero)aryl, aralkyl, cycloalkyl, etc.; R2 = (un)substituted carbocyclic or heterocyclic aryl; R3 = alkyl, adamantyl, (un)substituted (hetero)aryl or (hetero)aralkyl, (un)substituted carbamoyl; R4 = H, alkyl, (un)substituted (hetero)aralkyl, etc.]. Also disclosed are methods of their prepn. and their use as medicines, in particular for treating a wide variety of pathol. conditions or diseases involving somatostatin receptors. In particular, these pathol. conditions include acromegaly, pituitary adenoma, endocrine gastroenteropancreatic tumors (including carcinoid syndrome), and gastrointestinal bleeding. Examples include a few detailed syntheses, a listing of over 2800 characterized invention compds., and various precursor prepns. For instance, 4-H2NC6H4CH2CH2NH2 was bound to Wang resin p-nitrophenylcarbonate (at the aliph. amino group), and the resin-bound amine reacted sequentially with PhCH2CH2NCS, bromopyruvic acid, and 4-ClC6H4CH2NH2 to give, after acidic cleavage, (Z)-isomeric title compd. II. Twenty selected compds. I, including III.2HCl, inhibited binding of [125I-Tyr11]SRIF-14 to human somatostatin receptors in vitro with Ki < 200 nM.

IT **322747-62-6P 322747-76-2P 322747-90-0P**
322748-04-9P
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of (arylimino)dihydrothiazoles as somatostatin receptor ligands)

RN 322747-62-6 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(3-nitrophenyl)imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RN 322747-76-2 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(4-phenoxyphenyl)imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



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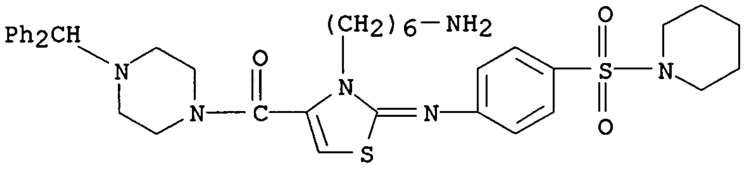
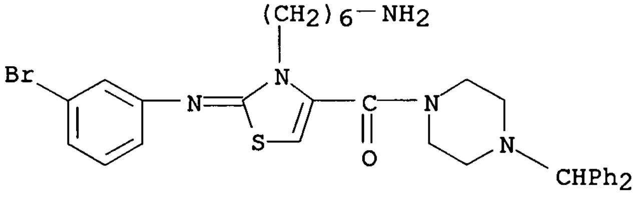


RN 322748-04-9 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2-[(3-bromophenyl)imino]-2,3-dihydro-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:314910 CAPLUS
DN 136:340698
TI Preparation of 2-substituted heterocyclic compounds as regulators of cellular transport proteins
IN Degenhardt, Charles Raymond; Eickhoff, David Joseph
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

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     PATENT NO.          KIND    DATE         APPLICATION NO.         DATE
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PI   WO 2002032868        A2     20020425     WO 2001-US32524         20011016
     WO 2002032868        A3     20020906
     WO 2002032868        C1     20031113
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             UZ, VN, YU, ZA, ZW
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     CA 2420999           AA     20020425   CA 2001-2420999        20011016
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     EP 1326834           A2     20030716   EP 2001-987745         20011016
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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OS   MARPAT 136:340698
GI
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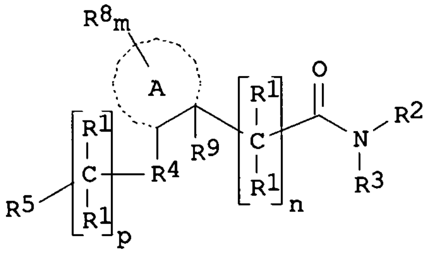


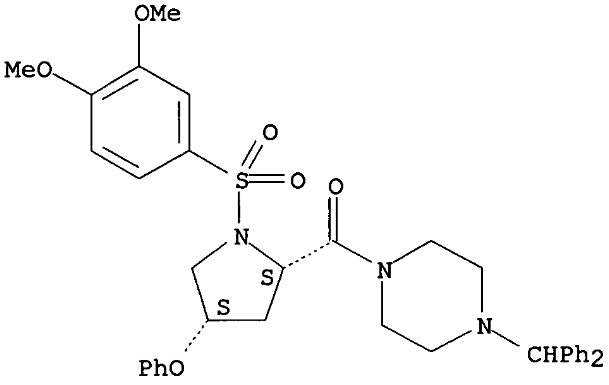
I

AB The title compds. such as 2-pyrrolidinecarboxamides and 2-piperidinecarboxamides [I; m, p = 0 to .apprx.6; n = 0 to 10; A = substituted heterocyclic group having .apprx.4 to .apprx.9 members; R1 = H, HO, (un)substituted hydrocarbon, heterogeneous, carbocyclic, heterocyclic, arom., or heteroarom. group; R2 and R3 are bonded together to form a substituted heterocyclic group having .apprx.4 to .apprx.9 members, with the proviso that the substituted heterocyclic group optionally contains 1 or more members selected from the group consisting of O, and (un)substituted NH; R4 = SO2, CO, CO-CO, CHR1; R5 = NR6R7 and (O)rR6; wherein r is 0 or 1; R6, R8 = (un)substituted hydrocarbon, heterogeneous, carbocyclic, heterocyclic, arom., or heteroarom. group; R7 = H and R6; R9 = H, hydrocarbon group] are prepd. These compds. regulate the cellular transport proteins P-glycoprotein or MRP1, or both, which are the proteins believed to be largely responsible for causing multidrug resistance in cancer patients and are useful for treating multidrug resistance. Thus, 1-(piperidine-2-carbonyl)piperidine-3-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (prepn. given) (234.4 mg) was dissolved in ethanol (12 mL) at ambient temp., followed by adding (R)-5-oxiranylmethoxyquinoline (100.0 mg), and the resulting mixt. was refluxed for 24.5 h to give 1-[1-[2-(R)-hydroxy-3-(quinolin-5-yloxy)propyl]piperidine-2-carbonyl]piperidine-2-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (II). In an accumulation assay in NIH-MDR1-G185 cells overexpressing the human transporter Pgp using BODIPY-FL Taxol (Mol. Probes, Eugene, Ore.) as a fluorescent substrate, in vitro exhibited an cellular accumulation index of 6 for BODIPY-FL Taxol.

IT **417704-76-8P 417704-78-0P 417704-81-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-substituted heterocyclic compds. as regulators of cellular transport proteins for treating multidrug resistance in cancer patients)

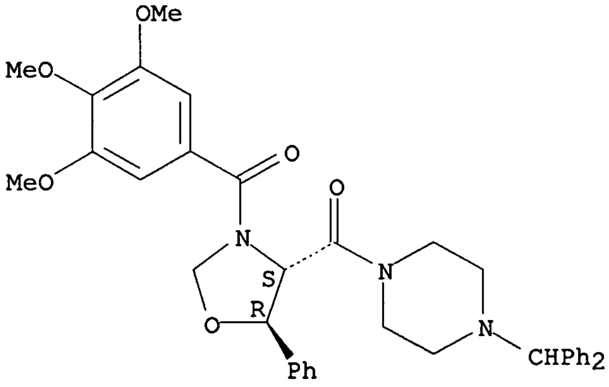
RN 417704-76-8 CAPLUS
CN Piperazine, 1-[[(2S,4S)-1-[(3,4-dimethoxyphenyl)sulfonyl]-4-phenoxy-2-pyrrolidinyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 417704-78-0 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(4R,5S)-5-phenyl-3-(3,4,5-trimethoxybenzoyl)-4-oxazolidinyl]carbonyl]-, rel- (9CI) (CA INDEX NAME)

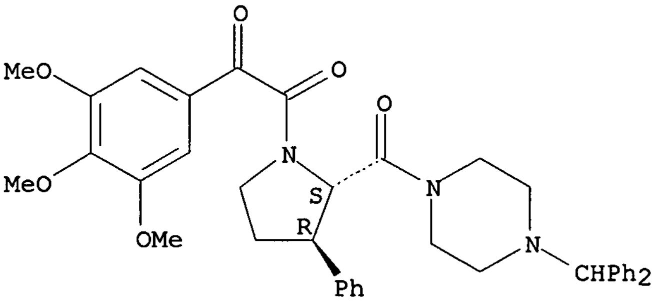
Relative stereochemistry.



RN 417704-81-5 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S,3R)-1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-3-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.



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L6   ANSWER 15 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2002:312015  CAPLUS
DN   136:325426
TI   Preparation of piperidine derivatives useful for treating multidrug
     resistance and compositions thereof
IN   Degenhardt, Charles Raymond; Eickhoff, David Joseph
PA   The Procter & Gamble Co., USA
SO   U.S., 50 pp.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 4
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   US 6376514           B1    20020423   US 2000-740643         20001219
     US 2002082262        A1    20020627   US 2000-740642         20001219
     US 2002091120        A1    20020711   US 2000-740279         20001219
     US 2002115659        A1    20020822   US 2000-740644         20001219
     US 2002128269        A1    20020912   US 2000-740387         20001219
     CA 2421008           AA    20020425   CA 2001-2421008        20011016
     WO 2002032869        A2    20020425   WO 2001-US42781        20011016
     WO 2002032869        A3    20020822
     WO 2002032869        C1    20031120
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002014657        A5    20020429   AU 2002-14657          20011016
     EP 1326833           A2    20030716   EP 2001-983211         20011016
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004511546        T2    20040415   JP 2002-536053         20011016
     US 2002099215        A1    20020725   US 2001-996657         20011129
PRAI US 2000-241127P      P     20001017
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     US 2000-740643        A      20001219
     WO 2001-US42781       W      20011016
OS   MARPAT 136:325426
GI
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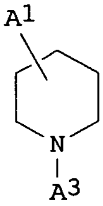

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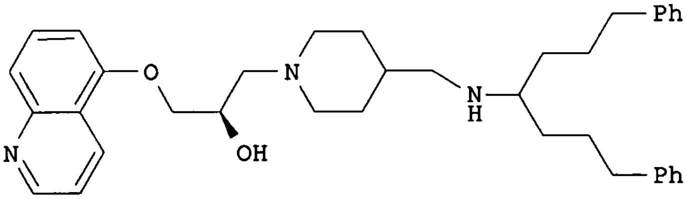


II

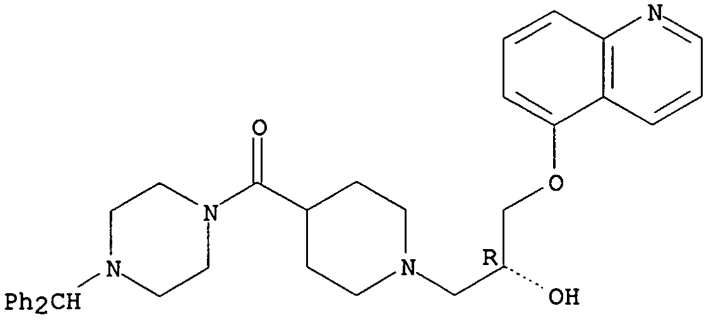
AB Title compds. I [A1 = [C(R1)2]x-D1-D2-R2; R1 = H, OH, alkyl, carbocyclic, arom. group; x = 0-10; R2 = alkyl, carbocyclic, arom. group; D1-2 = CO, NR3, with the proviso that wherein when D1 = NR3 then D2 = CO and when D2 = NR3, D1 = CO; R3 = H, R2; A3 = D4-[C(R1)2]t-D5; t = 0-6; D4 = CO, CHR1; D5 = NHR6, OR6; R6 = quinolyl] were prepd. For instance, (R)-5-oxiranylmethoxyquinoline was prepd. from (R)-glycidyl tosylate and 5-hydroxyquinoline (DMF, NaH), and used to alkylate piperidine-4-carboxylic acid [4-phenyl-1-(3-phenylpropyl)butyl]amide (prepn. given; i-PrOH, 70.degree.C, 18 h) to give II. The half-max. inhibition of MDR1-ATPase, Ki (stimulated by 30-40 .mu.M verapamil) for II = 0.3 .mu.M. I are useful for treating multidrug resistance and can be formulated optionally with a therapeutic agent, e.g., Taxol.

IT **414867-00-8P 414867-07-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; prepn. of piperidine derivs. useful for treating multidrug resistance and compns. thereof)

RN 414867-00-8 CAPLUS

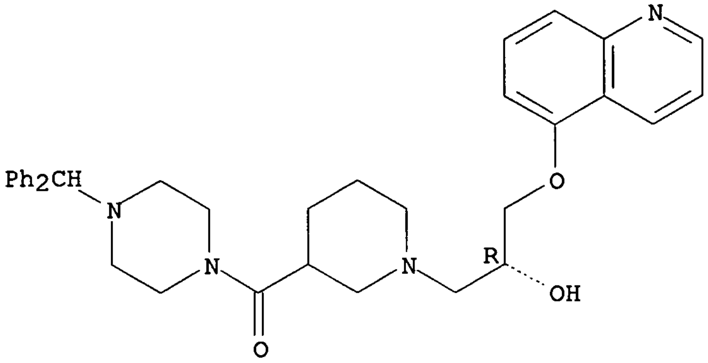
CN Piperazine, 1-(diphenylmethyl)-4-[[1-[(2R)-2-hydroxy-3-(5-quinolinyloxy)propyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 414867-07-5 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[1-[(2R)-2-hydroxy-3-(5-quinolinyloxy)propyl]-3-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:923564 CAPLUS
DN 136:53769
TI Preparation of ureas as anti-cancer agents
IN Kim, Joong Young; Yoon, Byung Hoon; Hwang, Sun Kyung; Oh, Chul Min; Park, Mee Seon; Song, Kyoung Ok; Oh, Seong Soo
PA Chaconne NSI Co., Ltd., S. Korea
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2001095856        A2    20011220   WO 2001-KR1017         20010613
     WO 2001095856        A3    20020627
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
            SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     KR 2001112841        A      20011222    KR 2001-33108          20010613
     AU 2001064376        A5     20011224    AU 2001-64376          20010613
     KR 2001113006        A      20011224    KR 2001-33102          20010613
     KR 2001113007        A      20011224    KR 2001-33105          20010613
     KR 2002012116        A      20020215    KR 2001-33111          20010613
     US 2002019389        A1     20020214    US 2001-880823         20010614
PRAI KR 2000-32925        A      20000615
     KR 2000-32927        A      20000615
     KR 2000-32930        A      20000615
     KR 2000-45427        A      20000805
     WO 2001-KR1017       W      20010613
OS   MARPAT 136:53769
GI
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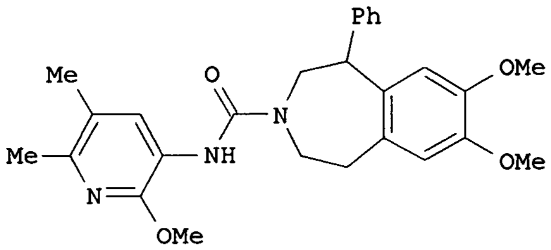


II

AB The title compds. BYC(:X)Het [I; X = O, S, NH, N(CN); Y = a bond, NH, O, S; B = alkyl, (un)substituted 3-pyridyl, diphenylmethyl, imidazol-1-yl, etc.; Het = (un)substituted 4-phenylpiperazino, 3H-benzazepin-3-yl, 4,4-diphenylpiperidino, etc.] and their pharmaceutically acceptable acid addn. salts, useful as anti-cancer agents, were prepd. Thus, reacting N-(5,6-dimethyl-2-methoxypyridin-3-yl)phenylcarbamate with 7,8-dimethoxy-1-phenyl-2,3,4,5-tetrahydro-3H-benzazepine in the presence of DBU in THF afforded 82% II. The anti-cancer activity of all exemplified compds. I was evaluated in vitro using A549 (lung cancer), SUN638 (gastric cancer), HCT116 (rectal cancer), and A431 (ovarian cancer) cell lines. Compds. I showed a superior anti-cancer activity in all mentioned above cell lines (detailed data given).

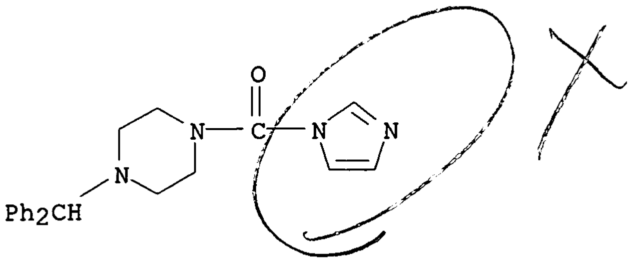
IT **381249-30-5P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of ureas as anti-cancer agents)

RN 381249-30-5 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-(1H-imidazol-1-ylcarbonyl)- (9CI) (CA INDEX NAME)



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L6   ANSWER 17 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:916406  CAPLUS
DN   136:31715
TI   Carboxylic acids and carboxylic acid isosteres of N-heterocyclic
     compounds, preparation thereof, and use in the treatment of neurological
     and other disorders
IN   Hamilton, Gregory S.; Norman, Mark H.; Wu, Yong-Qian
PA   GPI Nil Holdings, Inc., USA
SO   U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 204,237, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 5
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 6331537           B1    20011218    US 1999-453571         19991202
     ZA 9811063           A     20000707    ZA 1998-11063          19981203
     CA 2353460           AA    20000608    CA 1999-2353460        19991203
     WO 2000032588        A2    20000608    WO 1999-US28663        19991203
     WO 2000032588        A3    20010222
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     BR 9916461           A     20010904    BR 1999-16461          19991203
     EP 1135370           A2    20010926    EP 1999-961930         19991203
     EP 1135370           B1    20031015
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AU 767468            B2    20031113    AU 2000-18413          19991203
     AT 252078            E     20031115    AT 1999-961930         19991203
     NZ 511673            A     20040326    NZ 1999-511673         19991203
     ZA 2001004397        A     20030829    ZA 2001-4397           20010529
     NO 2001002765        A     20010720    NO 2001-2765           20010605
     NO 318909            B1    20050523
     BG 105643            A     20020228    BG 2001-105643         20010625
     US 2003186961        A1    20031002    US 2001-920017         20010802
     AU 2004200797        A1    20040325    AU 2004-200797         20040227
PRAI US 1998-87788P       P     19980603
     US 1998-204237       B2    19981203
     AU 1999-17081        A3    19981203
     US 1999-453571       A     19991202
     WO 1999-US28663      W     19991203
OS   MARPAT 136:31715
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AB   N-heterocyclic carboxylic acids and carboxylic acid isosteres are
     provided, as are their prepn. and their use for treating neurol. disorders
     including phys. damaged nerves and neurodegenerative diseases, for
     treating alopecia and promoting hair growth, for treating vision disorders
     and/or improving vision, and for treating memory impairment and/or
     enhancing memory performance by administering such compds.
IT   273924-93-9P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (carboxylic acids and carboxylic acid isosteres of N-heterocyclic
        compds., prepn., and use in treatment of neurol. and other disorders)
RN   273924-93-9  CAPLUS
CN   Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3,3-dimethyl-1,2-
     dioxopentyl)-2-pyrrolidinyl]carbonyl]- (9CI)  (CA INDEX NAME)

Absolute stereochemistry.
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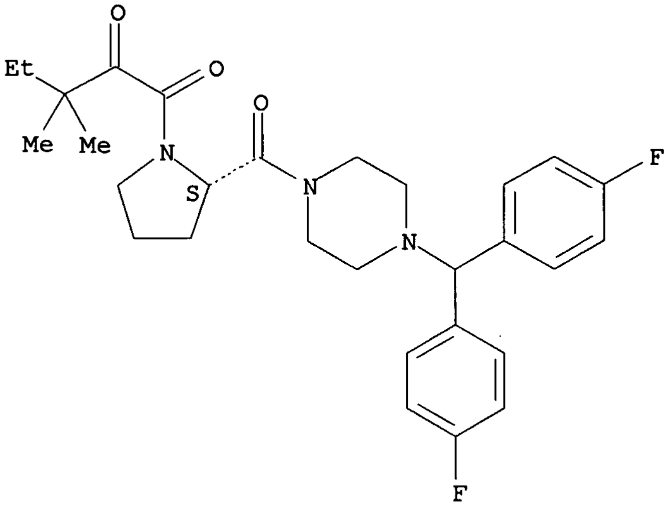

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RE.CNT  364    THERE ARE 364 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 18 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:747746  CAPLUS
DN   135:303763
TI   Preparation of pyrrolidines as inhibitors of Bax function.
IN   Halazy, Serge; Schwarz, Matthias; Quattropani, Anna; Thomas, Russel;
     Baxter, Anthony; Bombrun, Agnes
PA   Applied Research Systems Ars Holding N.V., Neth. Antilles
SO   PCT Int. Appl., 221 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2001074769        A1    20011011   WO 2001-EP3170         20010320
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2401137          AA    20011011    CA 2001-2401137        20010320
     EP 1268418          A1    20030102    EP 2001-925491         20010320
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2003529584       T2    20031007    JP 2001-572464         20010320
     US 2003171309       A1    20030911    US 2003-240000         20030428
     US 7018988          B2    20060328
PRAI EP 2000-106033      A     20000327
     WO 2001-EP3170      W     20010320
OS   MARPAT 135:303763
GI
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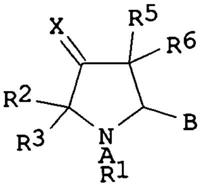


I

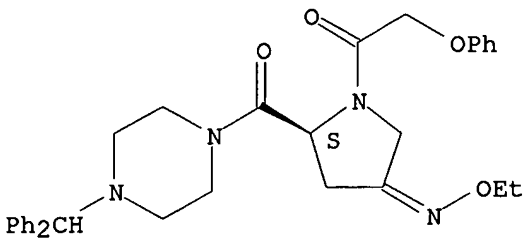
AB Title compds. [I; X = O, S, CR6R7, NOR6, NR6R7; A = CO, CO2, C(:NH), CONH, CSNH, SO2, SO2NH, CH2; B = CONR8R9, specified bicyclic heterocyclyl; R1 = (substituted) alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, acyl, etc.; R2-R5 = H, halo, alkyl, alkoxy; R6, R7 = H, (substituted) alkyl, alkenyl, alkynyl, alkoxy, halo, cyano, NO2, acyl, etc.; R8, R9 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl; R6R7N, R8R9N = 3-8 membered (substituted) (fused) heterocyclyl], were prepd. Thus, (2S,4EZ)-2-[[4-(1,3-benzodioxol-5-ylmethyl)-1-piperazinyl]carbonyl]-4-(methoxyimino)-N-pentyl-1-pyrrolidinecarboxamide [general prepn. from (2S,4EZ)-1-(tert-butoxycarbonyl)-4-(methoxyimino)-2-pyrrolidinecarboxylic acid, 1-isocyanatopentane, and 1-(1,3-benzodioxol-5-ylmethyl)piperazine given] at 10 .mu.M gave 59% inhibition of cytochrome C release triggered by Bid-induced Bax activation.

IT **364075-84-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolidines as inhibitors of Bax function)

RN 364075-84-3 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-4-(ethoxyimino)-1-(phenoxyacetyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



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RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 19 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:730700  CAPLUS
DN   135:288686
TI   Synthesis of substituted N-acyl/sulfonyl pyrrolidine derivatives as bax
     inhibitors
IN   Halazy, Serge; Schwarz, Matthias; Quattropani, Anna; Thomas, Russel;
     Baxter, Anthony; Scheer, Alexander
PA   Applied Research Systems ARS Holding N.V., Neth. Antilles
SO   PCT Int. Appl., 219 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   WO 2001072705        A1    20011004   WO 2001-EP3171         20010320
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2401242           AA    20011004   CA 2001-2401242        20010320
     EP 1268419           A1    20030102   EP 2001-929439         20010320
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     BR 2001009900        A     20030603   BR 2001-9900           20010320
     JP 2003528854        T2    20030930   JP 2001-570618         20010320
     NZ 521060            A     20040528   NZ 2001-521060         20010320
     EE 200200555         A     20040615   EE 2002-555            20010320
     ZA 2002006799        A     20030826   ZA 2002-6799           20020826
     BG 107132            A     20030430   BG 2002-107132         20020923
     NO 2002004598        A     20021125   NO 2002-4598           20020925
     US 2003212012        A1    20031113   US 2003-239912         20030210
PRAI EP 2000-106034       A     20000327
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GI
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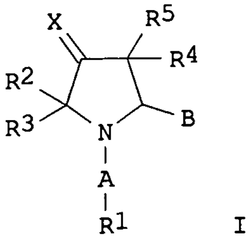

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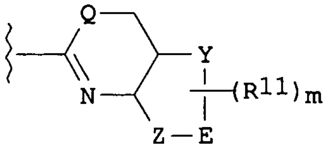

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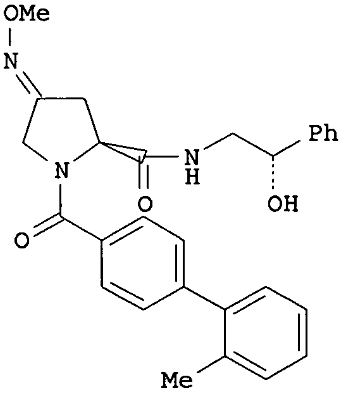


III

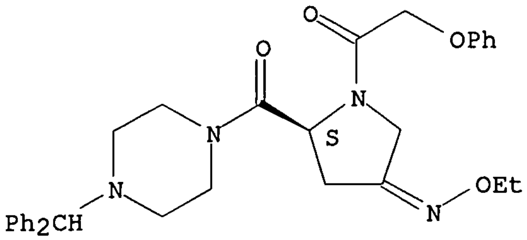
AB Title compds. I [X = CR6R7, NOR6, NNR6R7; A = C:O, C:OO, C:NH, C:ONH, C:SNH, S:O, S:ONH, CH; B = amide or II; Q = NR10, O, S; n = 0 - 2; Y, Z, E form together with the 2 C to which they are attached a 5-6 membered (hetero)aryl; R1 = alk(en/yn)yl, (hetero)aryl, cycloalkyl, acyl, etc.; R2-5 = H, halo, alkyl, alkoxy; R6-7 = H, alk(en/yn)yl, (thio)alkoxy, halogen, CN, NO2, acyl, alkoxycarbonyl, aminocarbonyl, (hetero)cycloalkyl, etc.; R11 = H, alk(en/yn)yl, OH, SH, etc. with some provisions] were prepd. and used as bax inhibitors. Over 400 compds. were disclosed. E.g., (2S)-1-(tert-butoxycarbonyl)-4-(methoxyimino)-2-pyrrolidinecarboxylic acid (prepn. given) was condensed with (S)-2-amino-1-phenylethanol (THF, i-BuOCOCl, -25.degree.C - room temp., 16 h) and the coupled product deprotected (DCM, HCl) to give the pyrrolidine. This intermediate was condensed with 4-(2-methylphenyl)benzoic acid (DMF, ClCOCOCl, Et3N, room temp.) to give a mixt. of oxime ethers which were sepd. by chromatog. to give III. III had IC50 = 0.07 .mu.M for the oxytocin receptor. I are useful in the treatment and/or prevention of disease states mediated by oxytocin, including premature labor, premature birth and dysmenorrhea.

IT **364075-84-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of substituted N-acyl/sulfonyl pyrrolidine derivs. as bax inhibitors)

RN 364075-84-3 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-4-(ethoxyimino)-1-(phenoxyacetyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



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RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 20 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:597978  CAPLUS
DN   135:166844
TI   Preparation of piperazinyl and piperidinyl ketones useful for treating or
     preventing neuronal damage and for stimulating nerve growth
IN   Tomlinson, Ronald; Lauffer, David; Mullican, Michael
PA   Vertex Pharmaceuticals Incorporated, USA
SO   PCT Int. Appl., 112 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
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     NZ 520638            A     20040528    NZ 2001-520638         20010209
     ZA 2002005933        A     20030724    ZA 2002-5933           20020724
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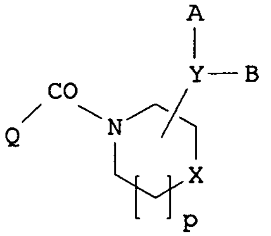


I

AB The present invention relates to piperazine and piperidine derivs. I (e.g. 1-[(S)-2-(1,1-diphenylmethyl)pyrrolidin-1-yl]-1-((S)-1-ethylpiperidin-2-yl)methanone), which are esp. useful for treating or preventing neuronal damage, particularly damage assocd. with neurol. diseases. These compds. are also useful for stimulating nerve growth. The invention also provides compns. comprising the compds. of the present invention and methods of using those compns. for treating or preventing neuronal damage or for stimulating nerve growth. In I, each Q is a monocyclic, bicyclic or tricyclic ring system wherein in said ring system: a. each ring is independently partially unsatd. or fully satd.; b. each ring comprises 3 to 7 ring atoms independently = C, N, O or S; c. .ltoreq.4 ring atoms in Q are selected from N, O or S; d. any S is optionally replaced with S(O) or S(O)2; e. at least one ring comprises a N ring atom that is substituted with R1; f. 1-5 H atoms in Q are optionally and independently replaced with halo, -OH, :O, :N-OR1, (C1-C6)-straight or branched alkyl, Ar-substituted-(C1-C6)-straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, Ar-substituted-(C2-C6)-straight or branched alkenyl or alkynyl, O-(C1-C6)-straight or branched alkyl, O-[(C1-C6)-straight or branched alkyl]-Ar, O-(C2-C6)-straight or branched alkenyl or alkynyl, O-[(C2-C6)-straight or branched alkenyl or alkynyl]-Ar, or O-Ar; and g. Q is not an indole or a pyroglutamic moiety. Each R1 is independently selected from (C1-C6)-straight or branched alkyl, Ar-substituted-(C1-C6)-straight or branched alkyl, cycloalkyl-substituted-(C1-C6) straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, or Ar-substituted-(C2-C6)-straight or branched alkenyl or alkynyl. One to two CH2 groups of said alkyl, alkenyl, or alkynyl chains in R1 are optionally and independently replaced with O, S, S(O), S(O)2, C(O) or N(R2), wherein when R1 is bound to N, the CH2 group of R1 bound directly to said N cannot be replaced with C(O). Ar = Ph, 1-naphthyl, 2-naphthyl, indenyl, azulenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyraxolyl, pyrazolinyl, pyrazolidinyl, isoxazolyl, isothiazolyl, 1,2,3-oxadiazolyl, 1,2,3-triazolyl, 1,3,4-thiadiazolyl, 1,2,4-triazolyl, 1,2,4-oxadiazolyl, 1,2,4-thiadiazolyl, 1,2,3-thiadiazolyl, benzoxazolyl, pyridazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, pyrazinyl, 1,3,5-triazinyl, 1,3,5-trithianyl, indolizinyl, indolyl, isoindolyl, 3H-indolyl, indolinyl, benzo[b]furanyl, benzo[b]thiophenyl, 1H-indazolyl, benzimidazolyl, benzthiazolyl, purinyl, 4H-quinolizinyl, quinolinyl, 1,2,3,4-tetrahydroisoquinolinyl, isoquinolinyl, 1,2,3,4-tetrahydroquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, 1,8-naphthyridinyl, or any other chem. feasible monocyclic or bicyclic ring system, wherein each ring consists of 5 to 7 ring atoms and wherein each ring comprises 0 to 3 heteroatoms independently selected from N, O, or S. Each Ar is optionally and independently substituted with 1-3 substituents selected from halo, hydroxy, nitro, -SO3H, :O, trifluoromethyl, trifluoromethoxy, (C1-C6)-straight or branched alkyl, (C1-C6)-straight or branched alkenyl, O-[(C1-C6)-straight or branched alkyl], O-[(C1-C6)-straight or branched alkenyl], O-benzyl, O-Ph, 1,2-methylenedioxy, -(R3)(R4), carboxy, N-(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) carboxamides, N,N-di(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) carboxamides, N-(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) sulfonamides, or N,N-di(C1-C6-straight or branched alkyl or C2-C6-straight or branched alkenyl) sulfonamides. Each of R3 and R4 = (C1-C6)-straight or branched alkyl, (C2-C6)-straight or branched alkenyl or alkynyl, H, Ph or benzyl; or wherein R3 and R4 are taken together with the N atom to which they are bound to form a 5-7 membered heterocyclic ring. Each R2 = H, (C1-C6) straight or branched alkyl, or (C2-C6)-straight or branched alkenyl or alkynyl. X = C(R2)2, N, N(R2), O, S, S(O), or S(O)2. Y = a bond, -O-, (C1-C6)-(straight or branched) alkyl, or (C2-C6)-(straight or branched) alkenyl or alkynyl; wherein Y is bonded to the depicted ring via a single bond or a double bond; and wherein one to two of the CH2 groups of said alkyl, alkenyl, or alkynyl is optionally and independently replaced with O, S, S(O), S(O)2, C(O) or N(R). P = 0-2; each of A and B is independently selected from H or Ar; or one of A or B is absent; and wherein two C ring atoms in the depicted ring structure may be linked to one another via a C1-C4 straight alkyl or a C2-C4 straight alkenyl to create a bicyclic moiety. Results of a neuroprotection assay are tabulated for about 150 of the claimed compds. About 70 example prepns. are included.

IT **354563-61-4P 354563-66-9P**

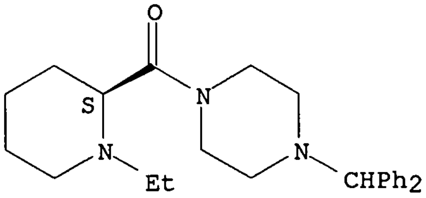
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of piperazinyl and piperidinyl ketones useful for treating or preventing neuronal damage and for stimulating nerve growth)

RN 354563-61-4 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

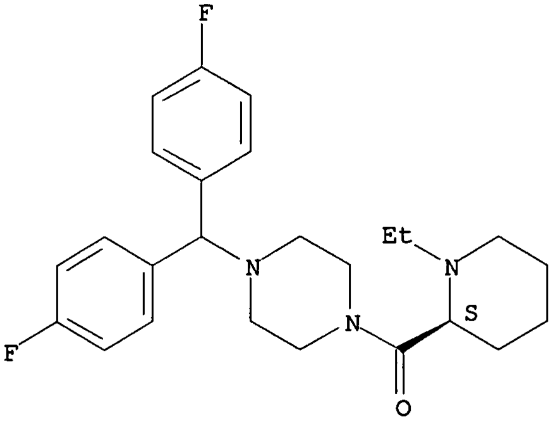
Absolute stereochemistry.



RN 354563-66-9 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **354563-62-5P 354563-68-1P 354563-70-5P**
354563-84-1P 354563-86-3P 354563-87-4P
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354564-10-6P 354564-12-8P 354564-13-9P
354564-14-0P 354564-15-1P 354564-16-2P
354564-48-0P 354564-51-5P 354564-55-9P
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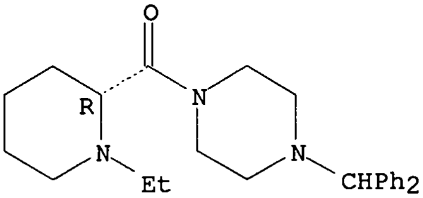
354564-68-4P 354564-70-8P 354564-71-9P
354564-81-1P 354564-85-5P 354564-87-7P
354564-89-9P 354564-91-3P 354564-93-5P
354564-95-7P 354564-97-9P 354564-98-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperazinyl and piperidinyl ketones useful for treating or preventing neuronal damage and for stimulating nerve growth)

RN 354563-62-5 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

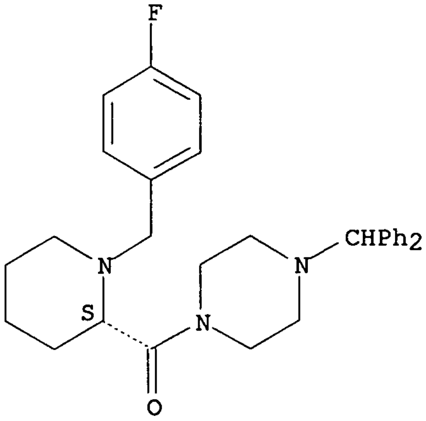
Absolute stereochemistry.



RN 354563-68-1 CAPLUS

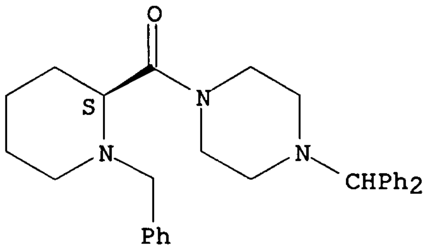
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



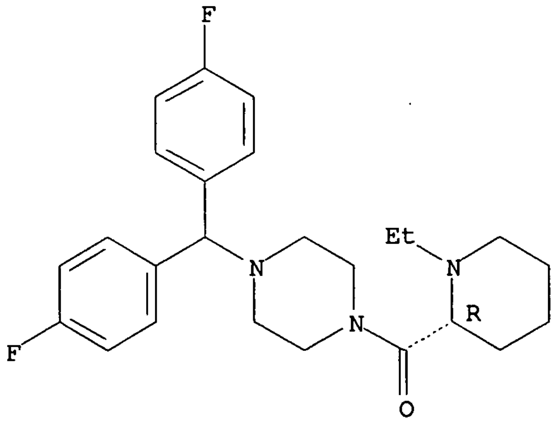
RN 354563-70-5 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



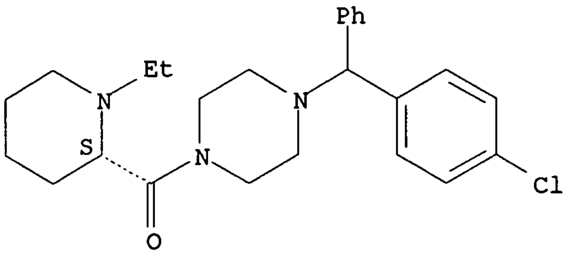
RN 354563-84-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354563-86-3 CAPLUS
CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

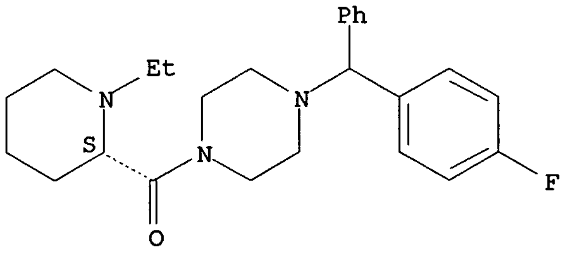
Absolute stereochemistry.



●2 HCl

RN 354563-87-4 CAPLUS
CN Piperazine, 1-[[(2S)-1-ethyl-2-piperidinyl]carbonyl]-4-[(4-fluorophenyl)phenylmethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

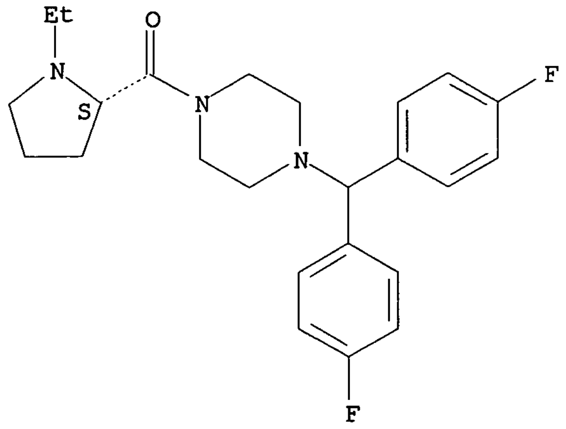
Absolute stereochemistry.



●2 HCl

RN 354563-96-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

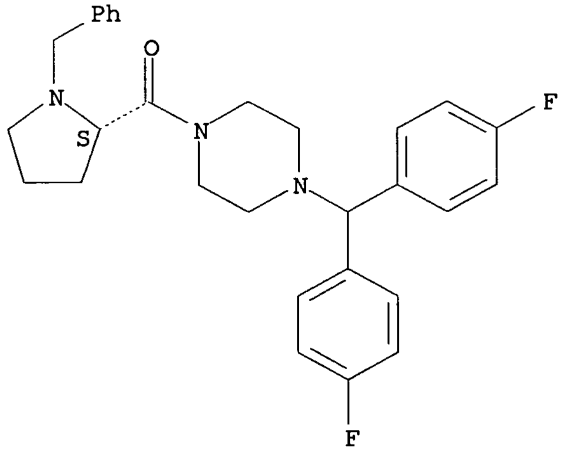
Absolute stereochemistry.



●2 HCl

RN 354563-97-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

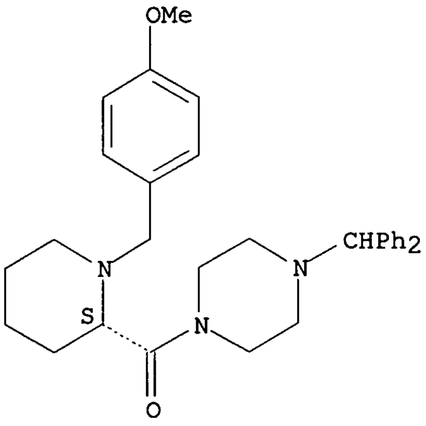
Absolute stereochemistry.



●2 HCl

RN 354564-08-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[[(2S)-1-[(4-methoxyphenyl)methyl]-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

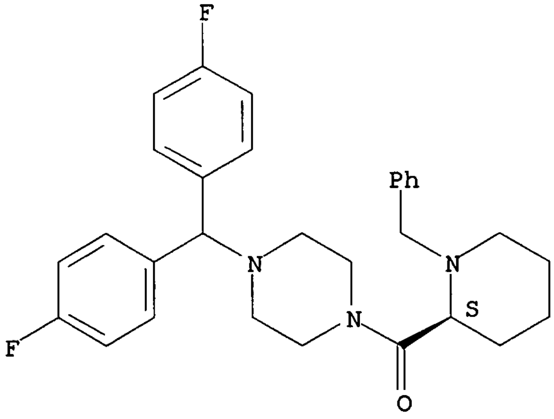
Absolute stereochemistry.



●2 HCl

RN 354564-10-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(phenylmethyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

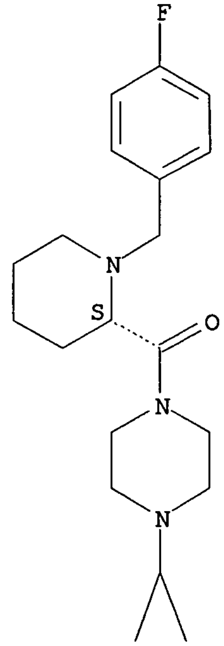


●2 HCl

RN 354564-12-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-[(4-fluorophenyl)methyl]-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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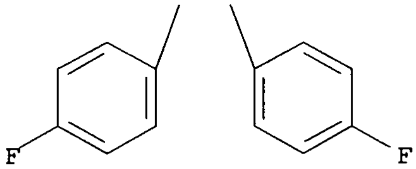
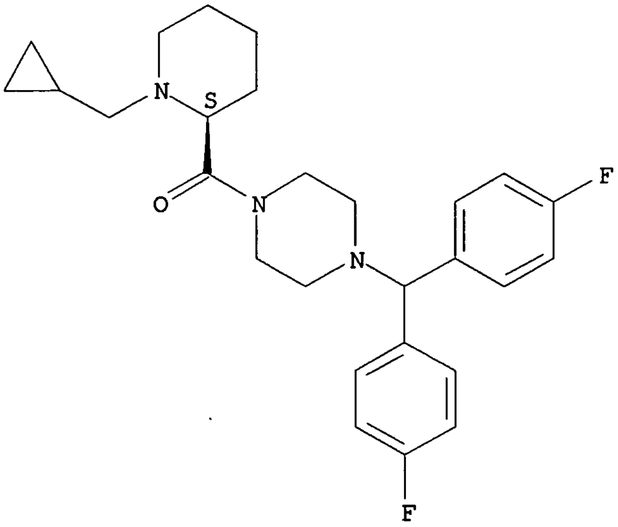


●2 HCl

RN 354564-13-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(cyclopropylmethyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

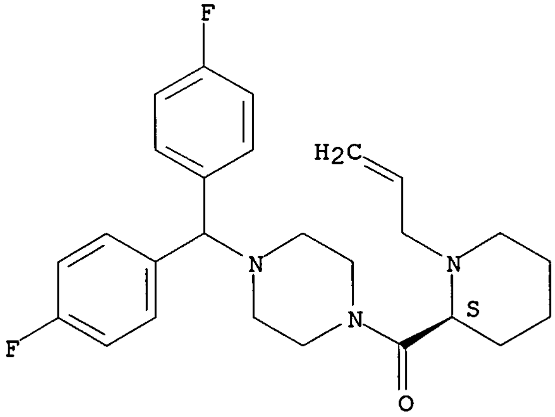
Absolute stereochemistry.



●2 HCl

RN 354564-14-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-propenyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

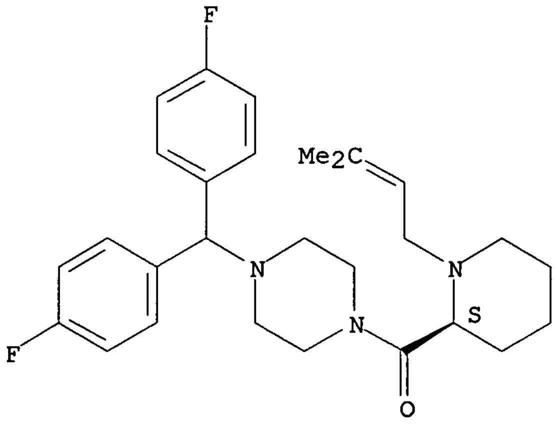
Absolute stereochemistry.



●2 HCl

RN 354564-15-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3-methyl-2-butenyl)-2-piperidinyl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

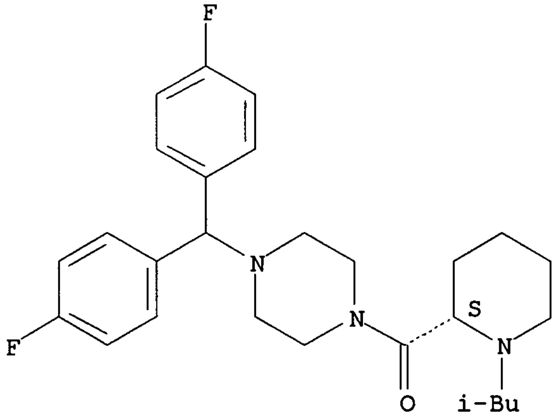
Absolute stereochemistry.



●2 HCl

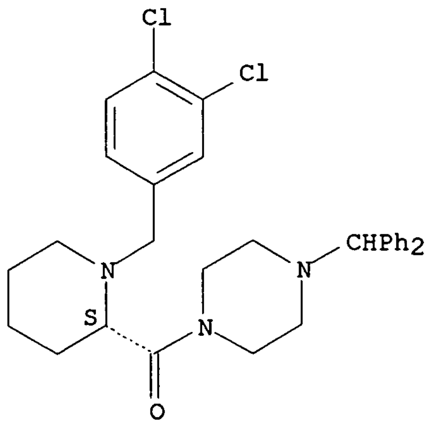
RN 354564-16-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(2-methylpropyl)-2-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-48-0 CAPLUS
CN Piperazine, 1-[[(2S)-1-[(3,4-dichlorophenyl)methyl]-2-piperidinyl]carbonyl]-4-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

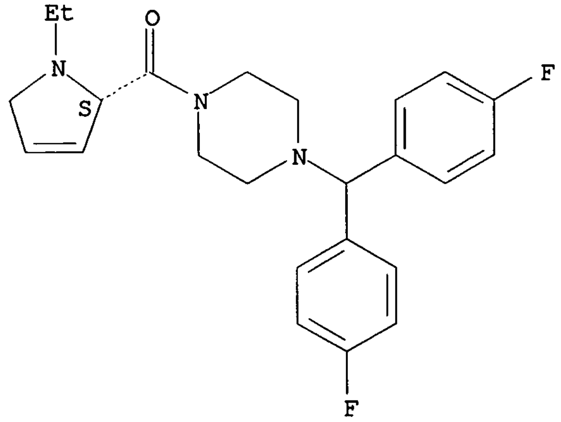
Absolute stereochemistry.



●2 HCl

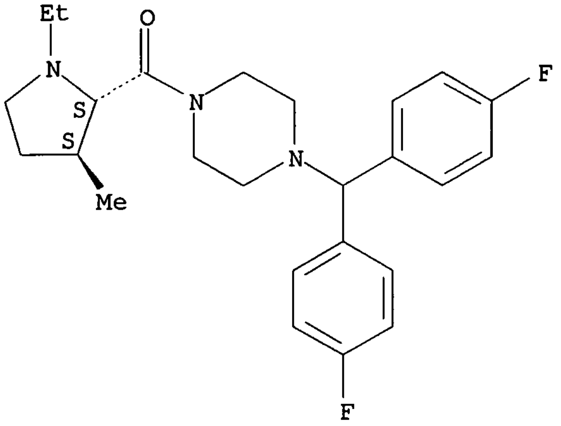
RN 354564-51-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2,5-dihydro-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



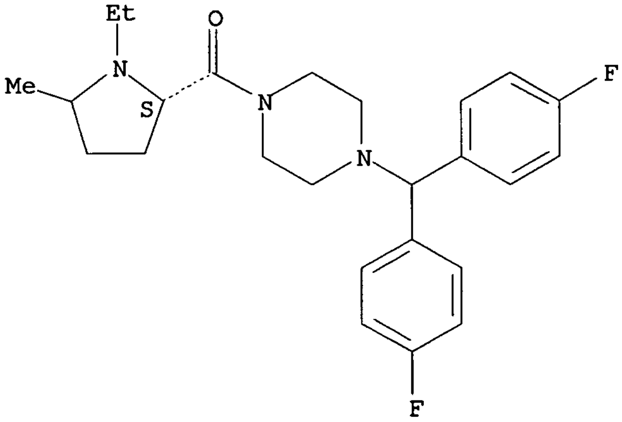
RN 354564-55-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



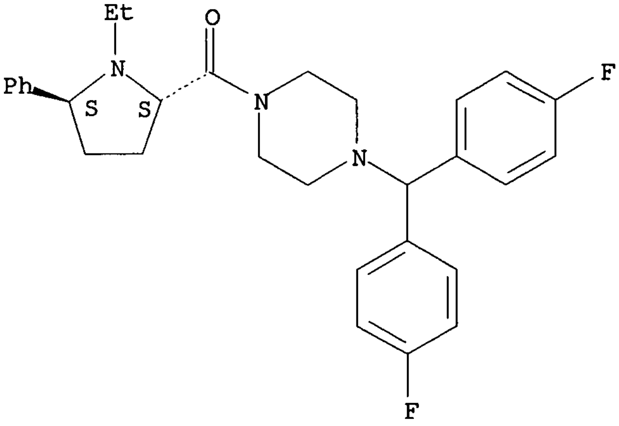
RN 354564-57-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-5-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



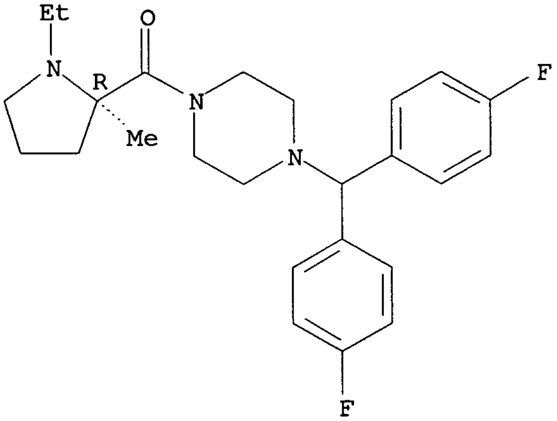
RN 354564-58-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5S)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



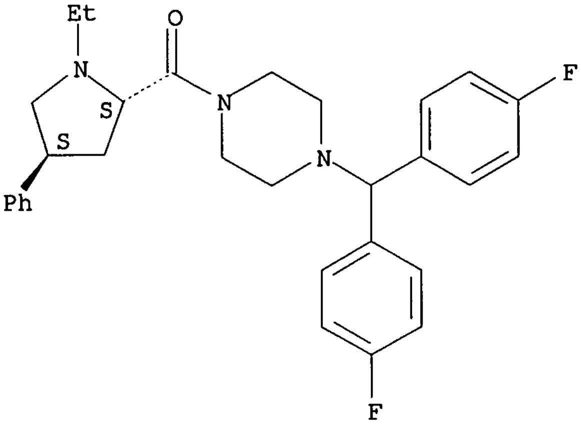
RN 354564-59-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-1-ethyl-2-methyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



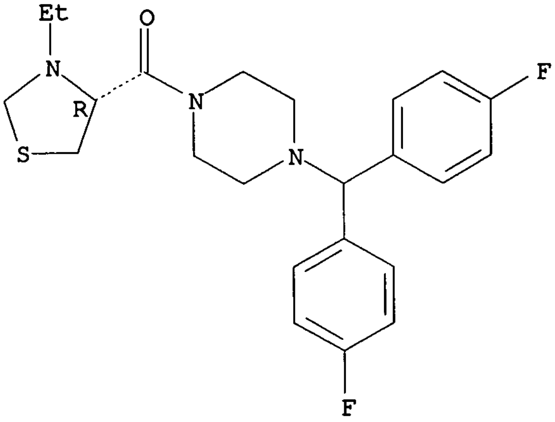
RN 354564-60-6 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-ethyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



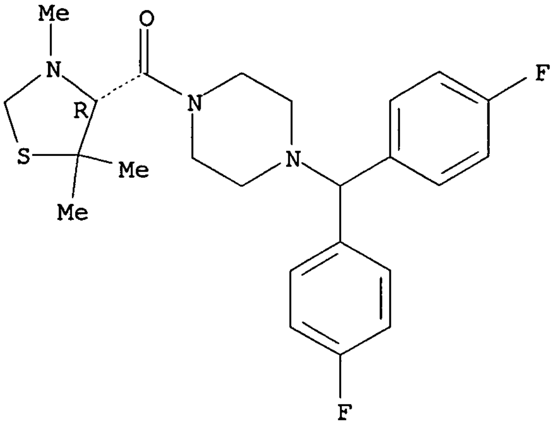
RN 354564-61-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3-ethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



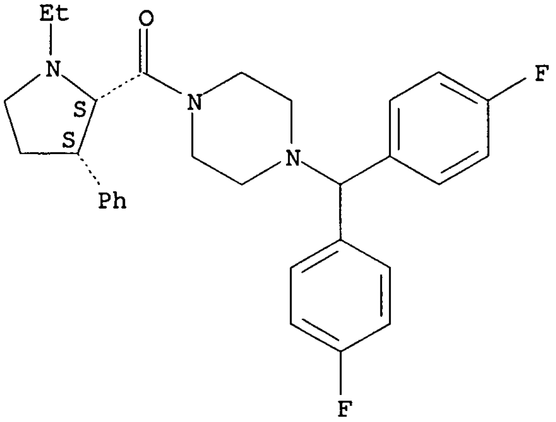
RN 354564-62-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(4R)-3,5,5-trimethyl-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

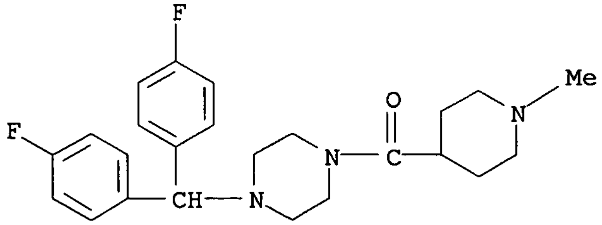


RN 354564-63-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-1-ethyl-3-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

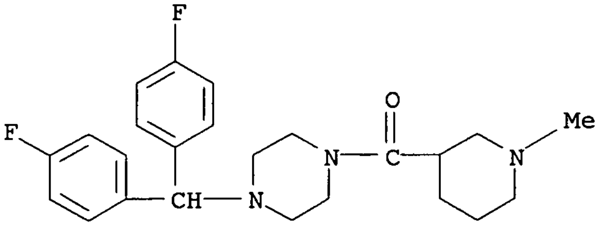


RN 354564-64-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-4-piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 354564-66-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(1-methyl-3-

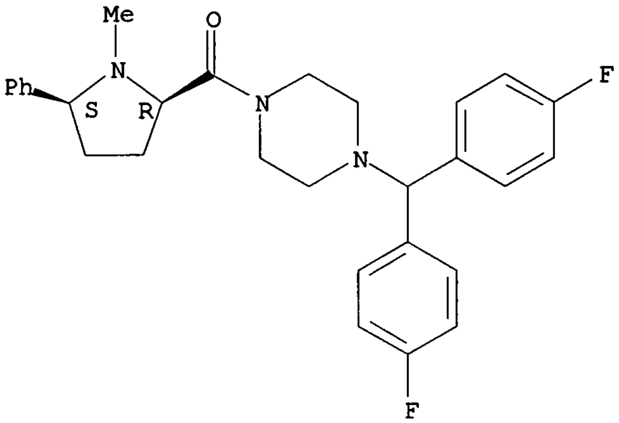
piperidinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 354564-68-4 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-1-methyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

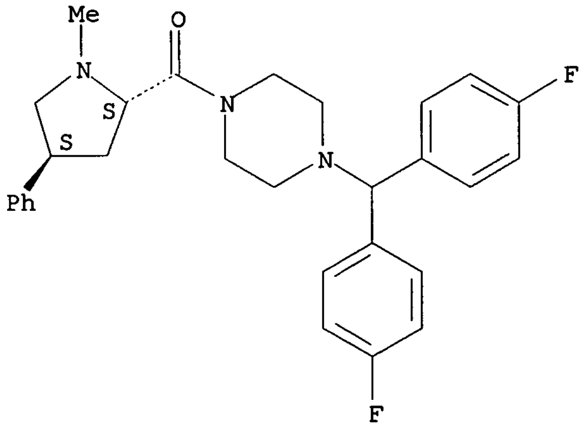
Absolute stereochemistry.



RN 354564-70-8 CAPLUS

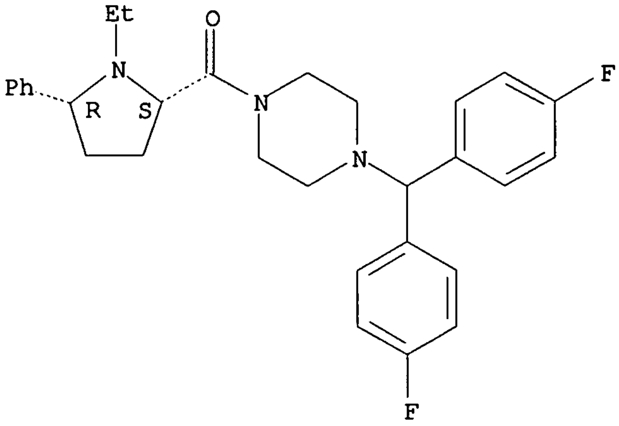
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-1-methyl-4-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



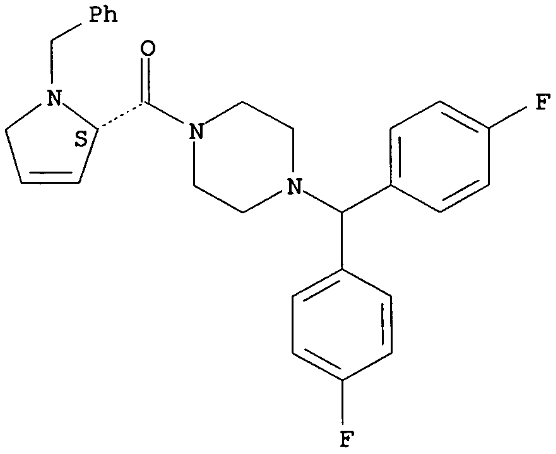
RN 354564-71-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-1-ethyl-5-phenyl-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



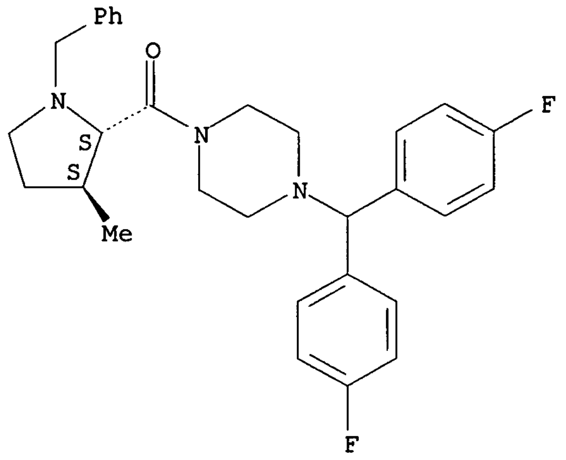
RN 354564-81-1 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-2,5-dihydro-1-(phenylmethyl)-1H-pyrrol-2-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



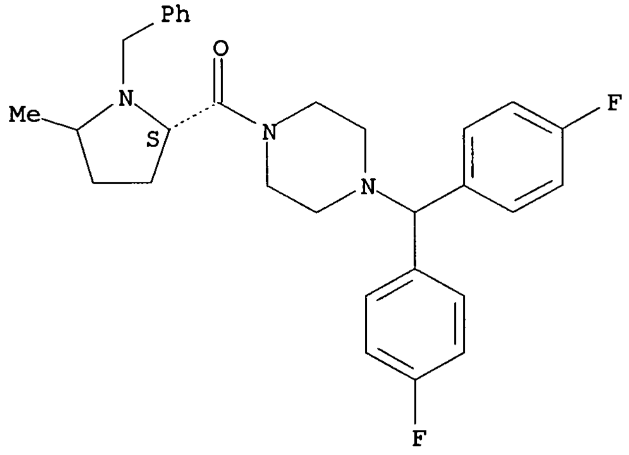
RN 354564-85-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



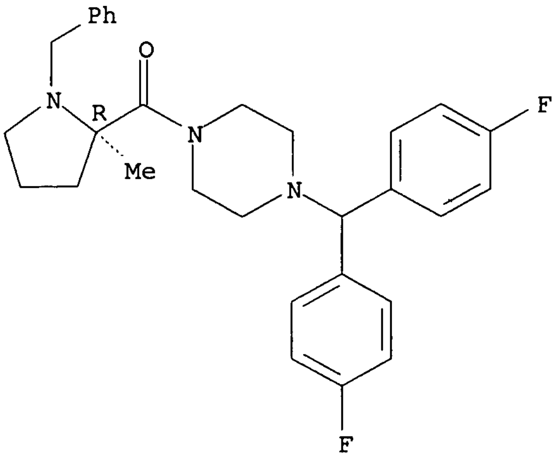
RN 354564-87-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-5-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



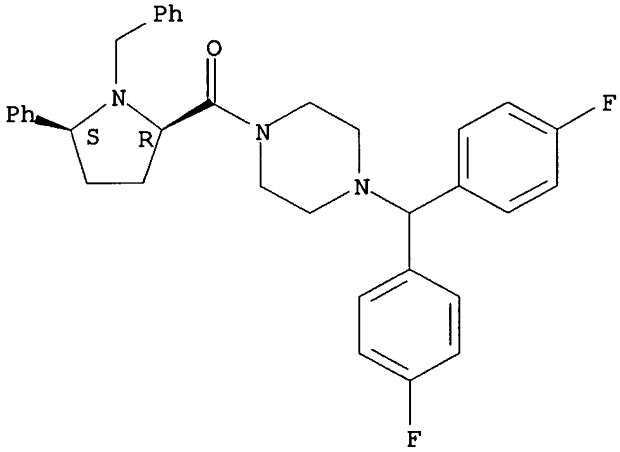
RN 354564-89-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R)-2-methyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



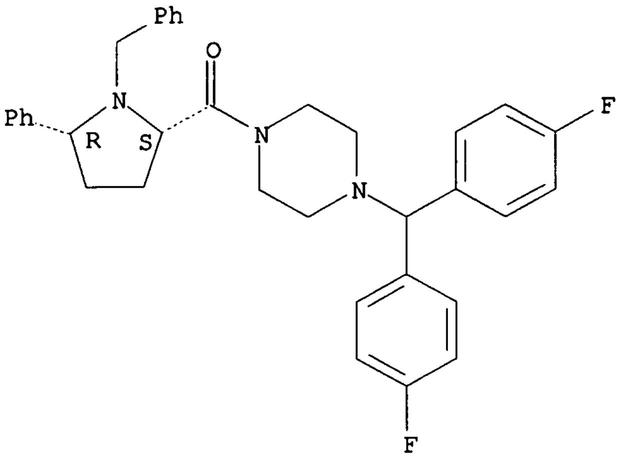
RN 354564-91-3 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2R,5S)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



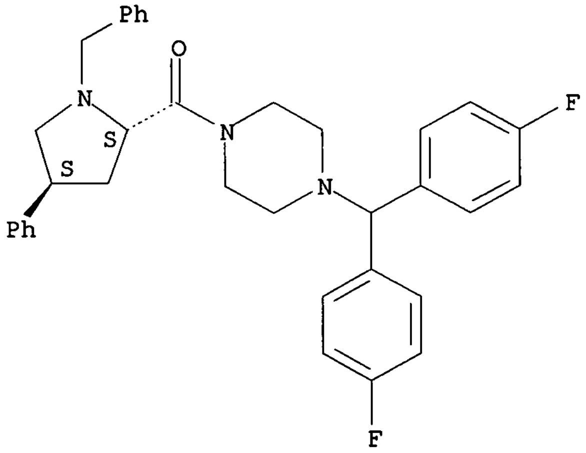
RN 354564-93-5 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,5R)-5-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



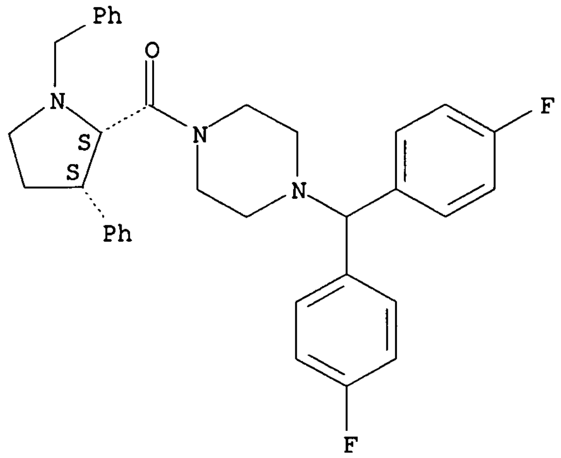
RN 354564-95-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,4S)-4-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



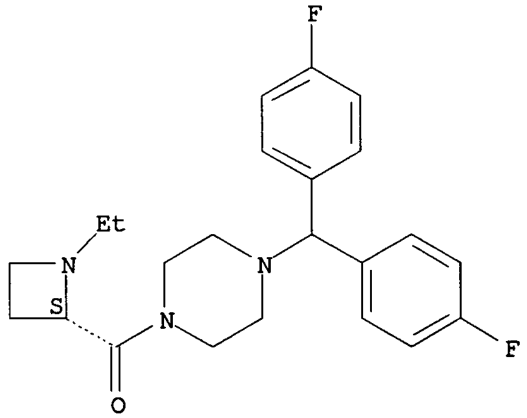
RN 354564-97-9 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S,3S)-3-phenyl-1-(phenylmethyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



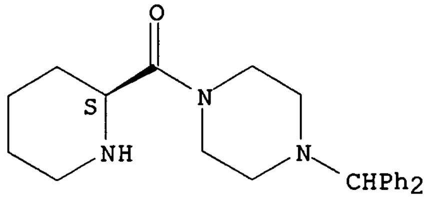
RN 354564-98-0 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-ethyl-2-azetidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **354563-69-2 354564-09-3 354564-11-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of piperazinyl and piperidinyl ketones useful for treating or preventing neuronal damage and for stimulating nerve growth)
RN 354563-69-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

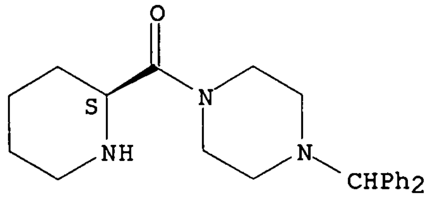


✓

●2 HCl

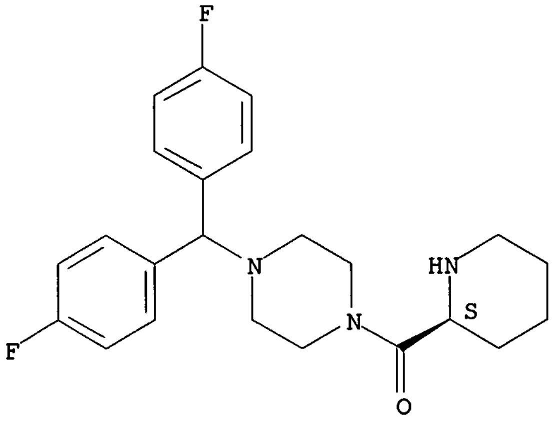
RN 354564-09-3 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354564-11-7 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2S)-2-piperidinylcarbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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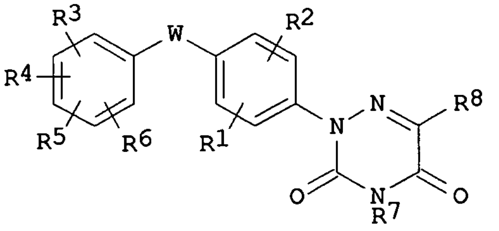
L6 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:246566 CAPLUS
DN 134:280864
TI Preparation of 6-azauracil derivatives as thyroid receptor ligands
IN Dow, Robert Lee; Chiang, Yuan-Ching Phoebe; Estep, Kimberly Gail

PA Pfizer Products Inc., USA
SO Eur. Pat. Appl., 153 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1088819	A2	20010404	EP 2000-308112	20000918
	EP 1088819	A3	20010411		
	EP 1088819	B1	20050615		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AT 297905	E	20050715	AT 2000-308112	20000918
	PT 1088819	T	20050930	PT 2000-308112	20000918
	ES 2240017	T3	20051016	ES 2000-308112	20000918
	JP 2001114768	A2	20010424	JP 2000-282882	20000919
	JP 3763565	B2	20060405		
	US 6787652	B1	20040907	US 2000-671668	20000927
	CA 2321380	AA	20010330	CA 2000-2321380	20000928
	CA 2321380	C	20060530		
	BR 2000004539	A	20010417	BR 2000-4539	20000929
	US 2004157844	A1	20040812	US 2004-763451	20040123
	US 6930107	B2	20050816		
PRAI	US 1999-156842P	P	19990930		
	US 2000-671668	A1	20000927		

OS MARPAT 134:280864
GI

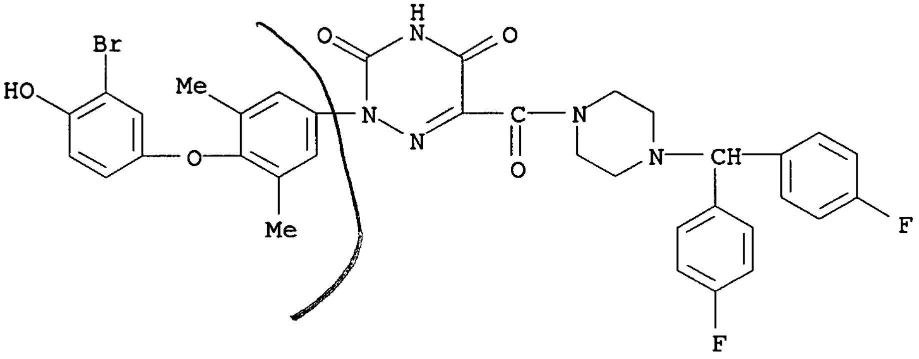


I

AB Title compds. [I; W = O, S, SO, SO2, NR30, CO, CH:CH, CH2, CHF, CF2, CH(OH); R1, R2 = H, halo, alkyl, cyano, OR12, CF3; R3 = H, halo, cyano, NO2, (substituted) alkyl, etc.; R4 = CR14R15R16, CONR19R20, aryl, heteroaryl, etc.; R3R4 = (CH2)b, Q(CH2)c, etc.; b = 3-7; c = 2-6; R5 = OR23; R4R5 = CR31:CR32NH, CR31:CR32S, etc.; R7 = H, alkyl, haloalkyl, (CH2)nCO2R9; n = 0-3; R8 = H, alkyl, CO2R9, CONR10R11; R9 = (substituted) alkyl, alkenyl, dialkenyl, cycloalkyl, aryl, heterocyclyl; R10, R11 = H, (substituted) alkyl, cycloalkyl, alkenyl, heterocyclyl; R10R11 = heterocyclyl; R12 = H, (substituted) alkyl; R14 = H, alkyl, OR34; R15 = H, alkyl; R14R15 = O; R16 = H, (substituted) alkyl, alkylcycloalkyl, alkylaryl, alkylheterocyclyl; R19, R20 = H, (substituted) alkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, cycloalkyl, etc.; R23 = H, (substituted) alkyl, COR24; R24 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heteroaryl; R30 = H, (substituted) alkyl, alkenyl, cycloalkyl, COR31, etc.; R31 = H, (substituted) alkyl, alkenyl,

cycloalkyl, aryl, heteroaryl, etc.; R32 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl; R34 = (substituted) aryl, heterocyclyl, alkyl, alkenyl, cycloalkyl], were prepd. for treatment of obesity, hyperlipidemia, thyroid disease, hypothyroidism, thyroid cancer, diabetes, atherosclerosis, hypertension, coronary heart disease, hypercholesteremia, depression, osteoporosis, cardiac arrhythmia, glaucoma and heart failure (no data). Thus, [[[4-(3-bromo-4-methoxyphenoxy)-3,5-dimethylphenyl]hydrazono]cyanoacetyl]carbamic acid Et ester (prepn. given) was heated with KOAc in HOAc at 120.degree. for 5 h to give 2-[4-(3-bromo-4-methoxyphenoxy)-3,5-dimethylphenyl]-3,5-dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-6-carbonitrile.

IT **332932-24-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of azauracil derivs. as thyroid receptor ligands)
RN 332932-24-8 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[2-[4-(3-bromo-4-hydroxyphenoxy)-3,5-dimethylphenyl]-2,3,4,5-tetrahydro-3,5-dioxo-1,2,4-triazin-6-yl]carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:78374 CAPLUS
DN 134:147596
TI 2-Arylimino-2,3-dihydrothiazoles, processes for their preparation, and their use as somatostatin receptor ligands
IN Moinet, Christophe; Sackur, Carole; Thurieau, Christophe
PA Societe de Conseils de Recherches et d'Applications Scientifiques (S.C.R.A.S, Fr.
SO PCT Int. Appl., 428 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001007424	A1	20010201	WO 2000-FR2095	20000721

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

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            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    FR 2796643           A1    20010126   FR 1999-9496         19990722
    FR 2796643           B1    20050429
    CA 2382940           AA    20010201   CA 2000-2382940      20000721
    BR 2000012647        A     20020409   BR 2000-12647        20000721
    EP 1202980           A1    20020508   EP 2000-958575       20000721
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003505453        T2    20030212   JP 2001-512509       20000721
    NZ 516599            A     20040130   NZ 2000-516599       20000721
    AU 782187            B2    20050707   AU 2000-70053        20000721
    RU 2266287           C2    20051220   RU 2002-104574       20000721
    US 6727269           B1    20040427   US 2002-31429        20020115
    NO 2002000314        A     20020306   NO 2002-314          20020121
PRAI FR 1999-9496        A     19990722
    WO 2000-FR2095       W     20000721
OS  MARPAT 134:147596
GI
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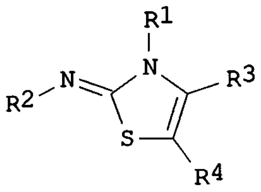

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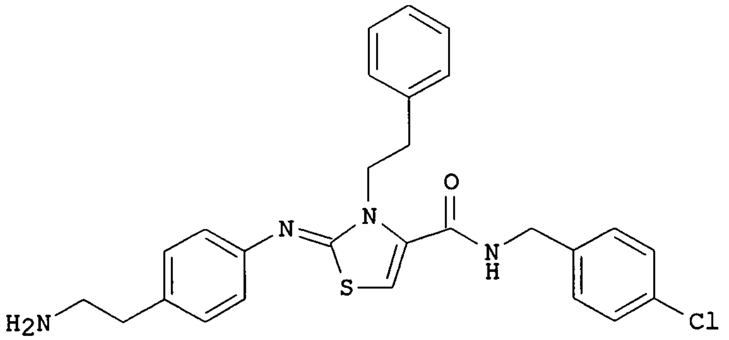
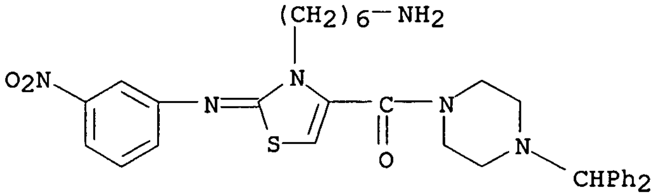


II

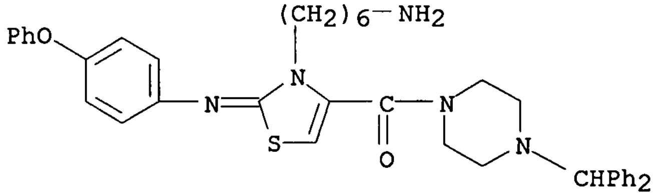
AB The invention concerns novel 2-arylimino-2,3-dihydrothiazole derivs. I and their racemates, enantiomers, combinations, and salts [wherein R1 = (un)substituted, particularly amino-substituted alk(en/yn)yl, (hetero)aryl, aralkyl, cycloalkyl, etc.; R2 = (un)substituted carbocyclic or heterocyclic aryl; R3 = alkyl, adamantyl, (un)substituted (hetero)aryl or (hetero)aralkyl, (un)substituted carbamoyl; R4 = H, alkyl, (un)substituted (hetero)aralkyl, etc.]. Also disclosed are methods of their prepn. and their use as medicines, in particular for treating a wide variety of pathol. conditions or diseases involving somatostatin receptors. In particular, these pathol. conditions include acromegaly, pituitary adenoma, endocrine gastroenteropancreatic tumors (including the carcinoid syndrome), and gastrointestinal bleeding. Examples include 6 detailed syntheses, a listing of over 2800 characterized invention compds., and various precursor prepns. For instance, 4-H2NC6H4CH2CH2NH2 was bound to Wang resin p-nitrophenylcarbonate (at the aliph. amino group), and the resin-bound amine reacted sequentially with PhCH2CH2NCS, bromopyruvic acid, and 4-ClC6H4CH2NH2 to give, after acidic cleavage, (Z)-isomeric title compd. II. Ten selected compds. I inhibited binding of [125I-Tyr11]SRIF-14 to human somatostatin receptors in vitro with Ki < 200 nM.

IT **322747-62-6P 322747-76-2P 322747-90-0P**
322748-04-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of (arylimino)dihydrothiazoles as somatostatin receptor ligands)

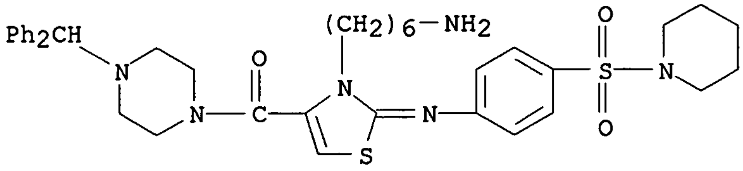
RN 322747-62-6 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(3-nitrophenyl)imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RN 322747-76-2 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[(4-phenoxyphenyl)imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RN 322747-90-0 CAPLUS
CN Piperazine, 1-[[3-(6-aminohexyl)-2,3-dihydro-2-[[4-(1-piperidinylsulfonyl)phenyl]imino]-4-thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



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RN   322748-04-9  CAPLUS
CN   Piperazine, 1-[[3-(6-aminohexyl)-2-[(3-bromophenyl)imino]-2,3-dihydro-4-
     thiazolyl]carbonyl]-4-(diphenylmethyl)- (9CI)  (CA INDEX NAME)
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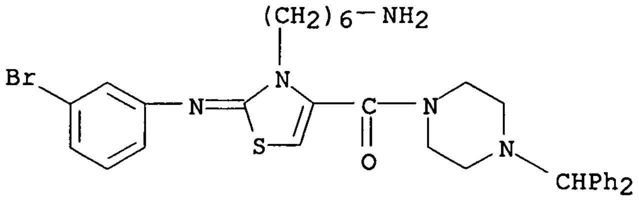

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RE.CNT  27     THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 23 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2000:911229  CAPLUS
DN   134:56687
TI   Preparation of dihydropyrimidine derivatives as N-type calcium channel
     antagonists
IN   Ohno, Seiji; Okajima, Akiko; Niwa, Seiji; Kito, Morikazu; Takahara, Akira;
     Ono, Yukitsugu; Kajigaya, Yuki; Takeda, Tomoko; Koganei, Hajime
PA   Ajinomoto Co., Inc., Japan
SO   PCT Int. Appl., 139 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
     ---------------     ----    --------    --------------------   --------
PI   WO 2000078730        A1     20001228    WO 2000-JP4107         20000622
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1193259           A1     20020403    EP 2000-940812         20000622
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 2002143023        A1     20021003    US 2001-25589          20011226
     US 6855716           B2     20050215
PRAI JP 1999-177493       A      19990623
     JP 1999-277717       A      19990930
     WO 2000-JP4107       W      20000622
OS   MARPAT 134:56687
GI
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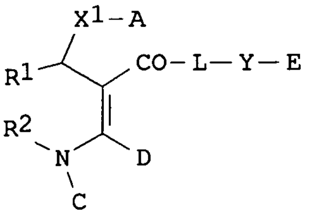

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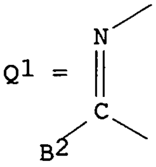
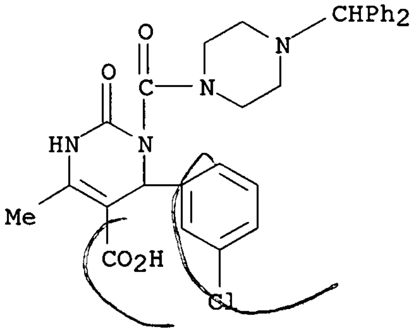


AB The title compds. I [R1 and R2 together form Q1, etc.; B2 = amino, etc.; A = 1-naphthyl, etc.; E = H, (un)substituted heteroaryl, etc.; C = H, alkyl, etc.; D = H, alkyl, etc.; L = O (with a proviso), etc.; Y = bond (with a proviso), etc.; X1 = CH2, etc.] are prepd. I exhibit selective antagonist activity against the N-type calcium channel. In an in vitro test for N-type calcium channel antagonism, 4-(3-chlorophenyl)-6-[(2-cyclohexylethoxy)methyl]-5-(3,3-diphenylpropylcarbamoyl)-2-phenyl-1,4-dihydropyrimidine showed the pIC50 value of 5.9.

IT **313999-83-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dihydropyrimidine derivs. as N-type calcium channel antagonists)

RN 313999-83-6 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 6-(3-chlorophenyl)-1-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-1,2,3,6-tetrahydro-4-methyl-2-oxo- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:911218 CAPLUS
DN 134:71495
TI Preparation of dihydropyridine derivatives as N-type calcium channel antagonists
IN Nakanishi, Chika; Masuzawa, Yoko; Hagihara, Masako; Yamamoto, Takashi; Matsueda, Hiroyuki; Ohno, Seiji; Niwa, Seiji; Kito, Morikazu; Takahara, Akira; Ono, Yukitsugu; Takeda, Tomoko; Kajigaya, Yuki; Koganei, Hajime
PA Ajinomoto Co., Inc., Japan

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SO   PCT Int. Appl., 152 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 2000078719        A1    20001228   WO 2000-JP4105         20000622
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1191021           A1    20020327   EP 2000-940810         20000622
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 2002147222        A1    20021010   US 2001-22874          20011220
PRAI JP 1999-177491       A     19990623
     WO 2000-JP4105       W     20000622
OS   MARPAT 134:71495
GI
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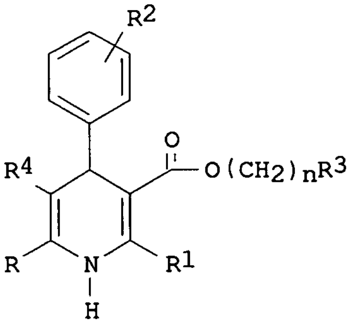

I

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AB   Title compds. [I; R = CH3, substituted alkyl; R1 = CH3,
     C6H5CH2OCH2CH2OCH2, CH3OCH2, CH3CH2, CH2O(CH2)2OCH2C6H5; R2 = 3-Cl, 2-NO2,
     3-NO2, 3-COOH; R3 = H, (C6H5)2CH, (C6H5)2CHCH2CH:CH, (C6H5)2(HO)C; R4 =
     COOH, CONH2, CN, CONH(CH2)2N(CH3)2; n = 0, 1, 2, 3; etc], analogs and
     pharmaceutically acceptable salts are prepd. and are showing a selective
     N-type calcium channel inhibitory activity.  Title compds. are usable as
     remedies for various diseases in which N-type calcium channel
     participates.  Thus, the title compd. I (R = CH3; R1 = CH2OCH2CH2N(CH2)5;
     R2 = 3-Cl; R3 = H; R4 = OH; n = 2) was prepd.
IT   314775-30-9P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of dihydropyridine derivs. as N-type calcium channel
        antagonists)
RN   314775-30-9  CAPLUS
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CN   3-Pyridinecarboxylic acid, 4-(3-chlorophenyl)-5-[[4-(diphenylmethyl)-1-
     piperazinyl]carbonyl]-1,4-dihydro-2,6-dimethyl-, 3,3-diphenylpropyl ester
     (9CI)  (CA INDEX NAME)
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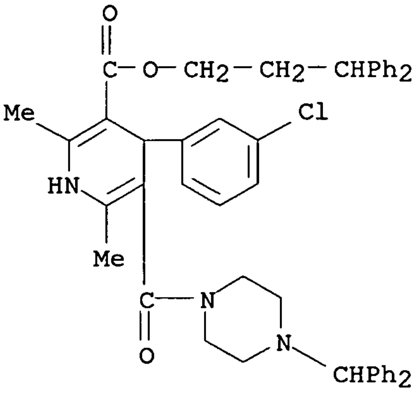

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RE.CNT  28     THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 25 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2000:384175  CAPLUS
DN   133:30959
TI   Preparation of prolinylalkanediones and related compounds for treating
     neurological disease, vision disorders, and alopecia.
IN   Hamilton, Gregory S.; Norman, Mark H.; Wu, Yong-qian
PA   GPI Nil Holdings, Inc., USA; Amgen, Inc.
SO   PCT Int. Appl., 166 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 5
     PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
     ---------------     ----    --------    --------------------   --------
PI   WO 2000032588        A2     20000608    WO 1999-US28663        19991203
     WO 2000032588        A3     20010222
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6331537           B1     20011218    US 1999-453571         19991202
     CA 2353460           AA     20000608    CA 1999-2353460        19991203
     BR 9916461           A      20010904    BR 1999-16461          19991203
     EP 1135370           A2     20010926    EP 1999-961930         19991203
     EP 1135370           B1     20031015
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AU 767468            B2     20031113    AU 2000-18413          19991203
     AT 252078            E      20031115    AT 1999-961930         19991203
     NZ 511673            A      20040326    NZ 1999-511673         19991203
     ZA 2001004397          A       20030829    ZA 2001-4397            20010529
     NO 2001002765          A       20010720    NO 2001-2765            20010605
     NO 318909              B1      20050523
     BG 105643              A       20020228    BG 2001-105643          20010625
     AU 2004200797          A1      20040325    AU 2004-200797          20040227
PRAI US 1998-204237         A       19981203
     US 1999-453571         A       19991202
     US 1998-87788P         P       19980603
     AU 1999-17081          A3      19981203
     WO 1999-US28663        W       19991203
OS   MARPAT 133:30959
GI
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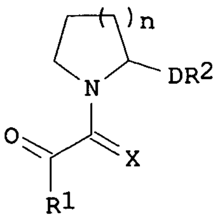


I

AB Title compds. [I; n = 1-3; X = O, S; R1 = (substituted) alkyl, alkenyl, aryl, heteroaryl, carbocyclyl, heterocyclyl; D = bond, (substituted) alkyl, alkenyl, alkynyl; R2 = CO2H, (substituted) CO2H isostere], were prepd. Thus, L-proline Me ester hydrochloride in CH2Cl2 was treated with Et3N and then with MeO2CCOCl to give 88% Me (2S)-1-(1,2-dioxo-2-methoxyethyl)-2-pyrrolidinecarboxylate. The latter in THF at -78.degree. was treated with 1,1-dimethylpropylmagnesium chloride followed by 3 h stirring at -78.degree. to give 75% Me (2S)-1-(1,2-dioxo-3,3-dimethylpentyl)-2-pyrrolidinecarboxylate. This was stirred overnight with aq. LiOH in MeOH to give 87% (2S)-1-(1,2-dioxo-3,3-dimethylpentyl)-2-pyrrolidinecarboxylic acid. In the MPTP model of Parkinson's disease in mice, I at 10 mg/kg orally gave 10.4-46.5% recovery of TH-stained dopaminergic neurons.

IT **273924-93-9P**

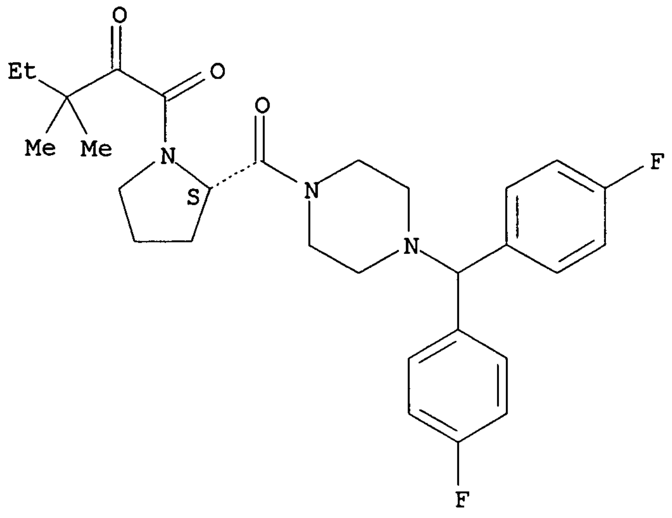
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of prolinylalkanediones and related compds. for treating neurol. disease, vision disorders, and alopecia)

RN 273924-93-9 CAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[[(2S)-1-(3,3-dimethyl-1,2-dioxopentyl)-2-pyrrolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L6   ANSWER 26 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1997:499179  CAPLUS
DN   127:176441
TI   Preparation of N-heterocyclylalkyl- or N-[(polycyclyl)-alkyl]-N'-
     substituted piperazines as insecticides.
IN   Silverman, Ian R.; Ali, Syed F.; Cohen, Daniel H.; Lyga, John W.; Simmons,
     Kirk A.; Cullen, Thomas G.
PA   FMC Corp., USA
SO   PCT Int. Appl., 59 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   WO 9726252           A1    19970724   WO 1997-US804          19970115
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
     US 2007              H1    20011204   US 1997-780371         19970109
     AU 9715809           A1    19970811   AU 1997-15809          19970115
PRAI US 1996-10237P       P     19960119
     US 1997-780371       A     19970109
     WO 1997-US804        W     19970115
OS   MARPAT 127:176441
GI
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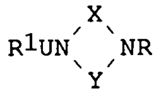
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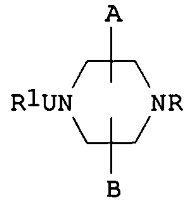

II

AB Title compds. [I; A, B = alkyl; U = alkylene, alkenylene, CHZ; Z = H, alkyl, cycloalkyl, Ph; R = (substituted) Ph, dibenzocycloalkyl, etc.; R1 = (substituted) Ph, naphthyl, tetrazolylphenyl, benzothienyl, benzimidazolyl, indolyl, pyrrolyl, quinolinyl, etc.; X = (CH2)m; Y = (CH2)n; m = 2,3; n = 1-3], were prepd. Thus, reaction of N-[bis(4-trifluoromethylphenyl)methyl]piperazine and 4-(pyrid-2-yloxy)benzyl chloride in Me2SO contg. NaI and diisopropylethylamine gave N-[4-(pyrid-2-yloxy)phenylmethyl]-N'-[bis(4-trifluoromethylphenyl)methyl]piperazine. The latter at 50 micromolar in feed gave 100% inhibition of the growth of tobacco budworms.

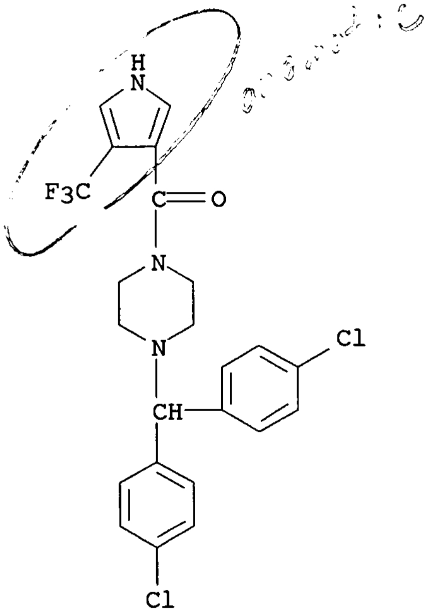
IT **194017-30-6P 194017-31-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-heterocyclylalkyl- or N-[(polycyclyl)-alkyl]-N'-substituted piperazines as insecticides)

RN 194017-30-6 CAPLUS

CN Piperazine, 1-[bis(4-chlorophenyl)methyl]-4-[[4-(trifluoromethyl)-1H-pyrrol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)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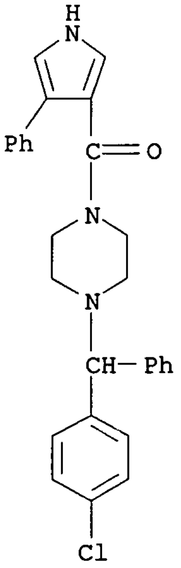
RN 194017-31-7 CAPLUS

CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(4-phenyl-1H-pyrrol-3-yl)carbonyl]- (9CI) (CA INDEX NAME)



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L6   ANSWER 27 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1995:758993  CAPLUS
DN   123:228219
TI   Anti-allergic and anti-inflammatory pyridine and pyridine N-oxide
     derivatives of (diarylmethyl)piperidines or -piperazines, and compositions
     and methods of use thereof
IN   Piwinski, John J.; Wong, Jesse; Green, Michael J.; Seidl, Vera; Friary,
     Richard
PA   Schering Corp., USA
SO   U.S., 38 pp. Cont.-in-part of U.S. Ser. No. 595,330 abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   US 5432175           A     19950711   US 1993-30454          19930401
     WO 9206971           A1    19920430   WO 1991-US7169         19911008
         W:  AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO,
             PL, RO, SD, SU, US
         RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN,
             GR, IT, LU, ML, MR, NL, SE, SN, TD, TG
PRAI US 1990-595330       B2    19901010
     WO 1991-US7169       W     19911008
OS   MARPAT 123:228219
GI
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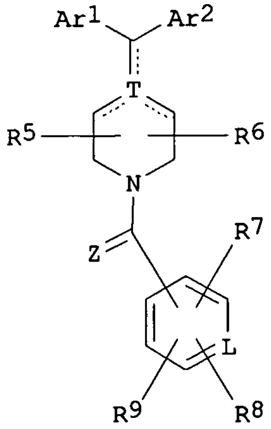

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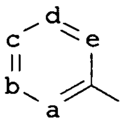

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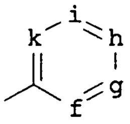
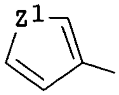


III



IV

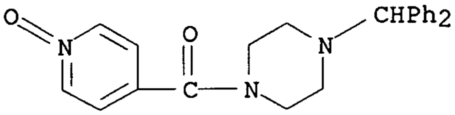
AB Pyridine and pyridine N-oxide derivs. of (diarylmethyl)piperidines or -piperazines I wherein Ar1 = II, Ar2 = III or a 5-membered heterocyclic arom. group, e.g., IV, wherein Z1 = O, S, NR10; and wherein the substitutable carbon atoms of the five-membered heterocyclic group may optionally be substituted with a group R1 as defined below; one of a, b, c, d and e represents N or NO and the others represent CH or CR1 or all of a, b, c, d and e represent CH or CR1 ; one of f, g, h, i and k represents N or NO and the others represent CH or CR2 or all of f, g, h, i and k represent CH or CR2 ; L represents N or N+O-; R1 and R2 may be the same or different and each R1 and each R2 independently represents, e.g., halo, CF3, OR11,; R5 and R6 may be the same or different and each independently represents, e.g, H, alkyl or aryl; each of R7, R8 and R9 independently represents, e.g., H, halo, CF3; R10 represents H or alkyl; each R11 independently represents H, alkyl or aryl; T represents CH, C or N, with the dotted lines attached to T representing one double bond in one of the indicated positions when T is C and being absent when T is CH or N; and Z represents O or S (with provisos); and pharmaceutically acceptable salts thereof are disclosed, which possess anti-allergic and anti-inflammatory activity. Pharmaceutical compns. contg. and methods of using the compds. are also described. Thus, e.g., amidation of 4-[(2-pyridyl)(4-chlorophenyl)methylene]piperidine (prepn. given) with isonicotinic acid N-oxide afforded title compd. I (R5-R9 = H, T = C, Ar1 = 2-pyridyl, Ar2 = 4-ClC6H4, with the double bond Ar1Ar2C:C external to the piperidine ring; Z = O, L = N+O-; 97% yield) which demonstrated PAF antagonism in vitro with IC50 = 0.5 .mu.M, and % inhibition of agonist-induced bronchospasm (in vivo, oral) = 100% inhibition of PAF at 3mg/kg and 0% inhibition of histamine at 3 mg/kg.

IT **142404-48-6P 142404-49-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(anti-allergic and anti-inflammatory pyridine and pyridine N-oxide derivs. of (diarylmethyl)piperidines or -piperazines, and compns. and

methods of use thereof)

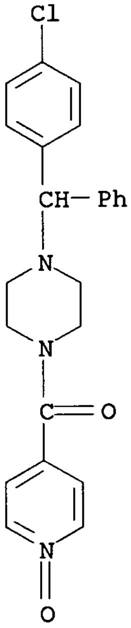
RN 142404-48-6 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 142404-49-7 CAPLUS

CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:245473 CAPLUS

DN 122:105812

TI Some 4-substituted 1-(3-pyridylmethyl)piperazines with antihistamine activity

AU Kmonicek, Vojtech; Valchar, Martin; Polivka, Zdenek

CS Research Institute Pharmacy Biochemistry, Prague, 130 60, Czech Rep.

SO Collection of Czechoslovak Chemical Communications (1994), 59(10), 2343-50 CODEN: CCCCAK; ISSN: 0010-0765

PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic

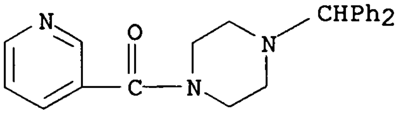
DT Journal

LA English

AB Several compds. derived from nicotinic acid were prepd. within a more extensive program aiming at the synthesis of new substances with expected antihistamine and antidepressant activity. Some of these compds. display certain structural resemblance with the antidepressant agent piberaline (EGYT 475, Trelibet) and its analogs. The products were used as intermediates for the synthesis of further compds. and most of them were subjected to pharmacol. testing.

IT **155348-38-2P 160539-73-1P 160539-74-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

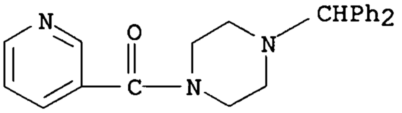
RN 155348-38-2 CAPLUS
CN Piperazine, 1-(diphenylmethyl)-4-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



RN 160539-73-1 CAPLUS
CN Butanedioic acid, compd. with 1-(diphenylmethyl)-4-(3-pyridinylcarbonyl)piperazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 155348-38-2
CMF C23 H23 N3 O

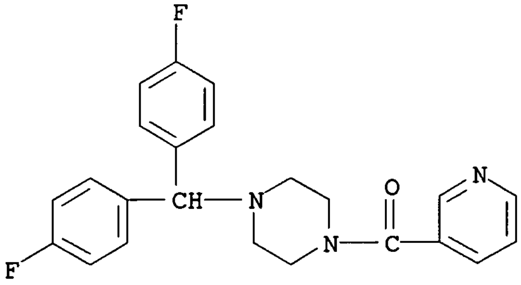


CM 2

CRN 110-15-6
CMF C4 H6 O4

$HO_2C-CH_2-CH_2-CO_2H$

RN 160539-74-2 CAPLUS
CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



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L6   ANSWER 29 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1994:409423  CAPLUS
DN   121:9423
TI   Process for preparation of new diphenylmethylpiperazine derivatives with
     antiallergic activity
IN   Orjales-Venero, Aurelio; Alonso Cires, Luisa
PA   Fabrica Espanola de Productos Quimicos y Farmaceuticos, S.A. (FAES), Spain
SO   Span., 4 pp.
     CODEN: SPXXAD
DT   Patent
LA   Spanish
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   ---------   --------------------   ---------
PI   ES 2046107           A1    19940116    ES 1992-500            19920305
     ES 2046107           B1    19940801
PRAI ES 1992-500                19920305
OS   MARPAT 121:9423
GI
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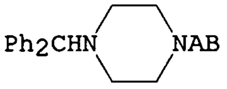

I

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AB   Title compds. I [A = CO, (CH2)nNHCO; n = 2-4; B = heteroaryl, cycloalkyl,
     or cycloalkenyl, which may be substituted by halo (preferably Cl or Br)]
     and pharmaceutically acceptable salts were prepd. by reaction of
     N-substituted piperazines with corresponding acid chlorides in a solvent
     (e.g., CH2Cl2, THF, Et2O) and in the presence of a base (e.g., Et3N,
     pyridine, NaHCO3) at room temp.  In nearly all cases, I showed
     antihistaminic and antiallergic activities comparable to terfenadine and
     cetirizine (no data).  For example, benzhydrylpiperazine and
     3-pyridinecarbonyl chloride in THF at 0.degree. to room temp. gave I (A =
     CO, B = 3-pyridyl).
IT   155348-38-2P, 1-(Diphenylmethyl)-4-(3-pyridinylcarbonyl)piperazine
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as antiallergic and antihistaminic)
RN   155348-38-2  CAPLUS
CN   Piperazine, 1-(diphenylmethyl)-4-(3-pyridinylcarbonyl)- (9CI)  (CA INDEX
     NAME)
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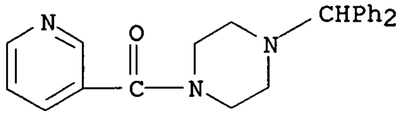

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L6   ANSWER 30 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1992:511641  CAPLUS
DN   117:111641
TI   Preparation of 4-(diarylmethylene)piperidines and N-
     (diarylmethyl)piperazines as allergy inhibitors and antiinflammatories
IN   Piwinski, John J.; Wong, Jesse; Green, Michael J.; Seidl, Vera; Friary,
     Richard
PA   Schering Corp., USA
SO   PCT Int. Appl., 76 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 9206971           A1    19920430    WO 1991-US7169          19911008
         W:  AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO,
             PL, RO, SD, SU, US
         RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN,
             GR, IT, LU, ML, MR, NL, SE, SN, TD, TG
     CA 2093798           AA    19920411    CA 1991-2093798         19911008
     CA 2093798           C     20000201
     AU 9188490           A1    19920520    AU 1991-88490           19911008
     AU 646519            B2    19940224
     ZA 9108044           A     19920729    ZA 1991-8044            19911008
     EP 553191            A1    19930804    EP 1991-918503          19911008
     EP 553191            B1    19950517
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 05508660          T2    19931202    JP 1991-517935          19911008
     JP 08009596          B4    19960131
     HU 66081             A2    19940928    HU 1993-1051            19911008
     ES 2072627           T3    19950716    ES 1991-918503          19911008
     IL 99676             A1    19951127    IL 1991-99676           19911008
     CZ 280532            B6    19960214    CZ 1993-622             19911008
     US 5432175           A     19950711    US 1993-30454           19930401
     NO 9301312           A     19930610    NO 1993-1312            19930406
     NO 305028            B1    19990322
     KR 9705927           B1    19970422    KR 1993-71070           19930409
PRAI US 1990-595330       A2    19901010
     WO 1991-US7169       A     19911008
OS   MARPAT 117:111641
GI
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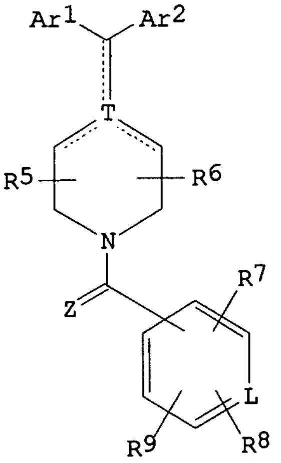

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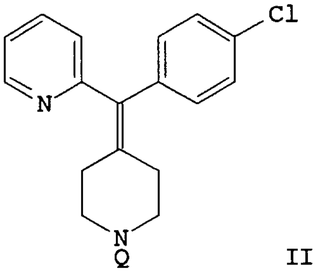
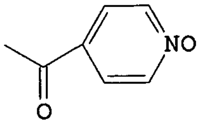


II

Q1=

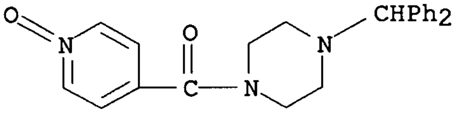


AB Title compds. [I; Ar1, Ar2 = (benzanellated) (substituted) (hetero)aryl; R5, R6 = H, aryl, (substituted) alkyl; geminal R5R6 = O, S; R7-R9 = H, halo, CF3, OR11, COR11, SR11, SOnR12, N(R11)2, NO2, cyano, CO2R11, OCO2R12, O2CR11, CON(R11)2, aryl, alkynyl, (substituted) alkyl, alkenyl, etc.; n = 1, 2; R11 = H, alkyl, aryl; R12 = alkyl, aryl; T = CH, C, N; Z = O, S, (H, H), (H, alkyl); L = N, NO; dotted lines = optional double bonds], were prepd. Thus, piperidine deriv. II (Q = H) (prepn. given), isonicotinic acid N-oxide, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride, and 1-hydroxybenzotriazole in CH2Cl2 were stirred at 0.degree.-room temp. to give 97% II (Q = Q1) (III). III at 3 mg/kg orally in guinea pigs gave 100% inhibition of platelet-activating factor (PAF)-induced bronchospasm, and 0% inhibition of histamine-induced bronchospasm. I showed varying combinations of PAF and histamine antagonist activity. Tablets and capsules were prepd. contg. III.

IT **142404-48-6P 142404-49-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as allergy inhibitor and antiinflammatory)

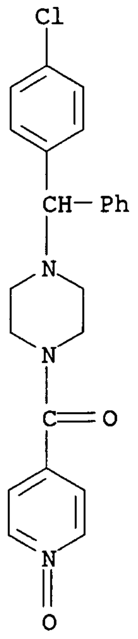
RN 142404-48-6 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 142404-49-7 CAPLUS

CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(1-oxido-4-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



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L6   ANSWER 31 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1991:514494  CAPLUS
DN   115:114494
TI   Preparation and formulation of thiazolidinecarboxamide derivatives as
     platelet-activating factor (PAF) antagonists
IN   Mase, Toshiyasu; Hara, Hiromu; Nagaoka, Hitoshi; Takahashi, Takumi;
     Suzuki, Takeshi; Tomioka, Kenichi; Yamada, Toshimitsu
PA   Yamanouchi Pharmaceutical Co., Ltd., Japan
SO   U.S., 82 pp. Cont.-in-part of U.S. Ser. No. 157,406, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 4987132           A     19910122    US 1988-232899         19880816
     ZA 8801182           A     19881026    ZA 1988-1182           19880219
     JP 02000179          A2    19900105    JP 1988-37224          19880219
     JP 06031230          B4    19940427
     JP 07002844          A2    19950106    JP 1993-205720         19930728
PRAI JP 1987-36950        A     19870220
     JP 1987-125259       A     19870521
     JP 1987-249499       A     19871001
     US 1988-157406       B2    19880217
     JP 1988-13928        A1    19880125
OS   MARPAT 115:114494
GI
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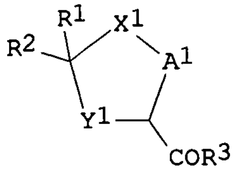

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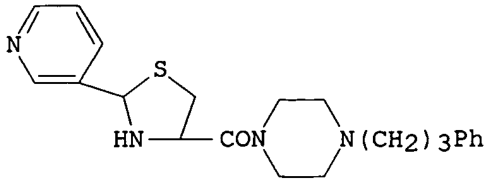


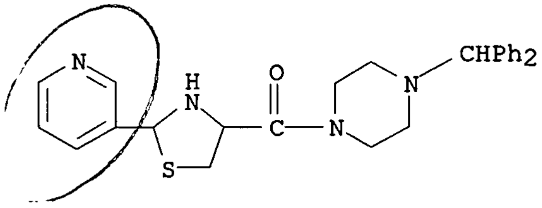
II

AB The title compds. [I; R1 = (un)substituted 5- or 6-membered hetero- or benzoheterocyclyl; R2 = H, alkyl, R1; X1 = O, S, CH2, alkylidene; Y1 = O, S, NR4; R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; A1 = CH2, CH2CH2, optionally substituted by alkyl groups; R3 = NR5R6, NHNR8R9, NR10OR11; one of R5, R6 = H, (un)substituted hydrocarbyl and the other = (un)substituted hydrocarbyl, R1; R5R6 = A2ZR7A3, A2OA3; A2, A3 = (un)substituted alkylene; Z = CH, N; R7 = H, CO2H, acyl, alkoxycarbonyl, CONH2, mono- or dialkylcarbamoyl, (un)substituted hydrocarbyl; R8-R11 = H, alkyl, aralkyl, aryl] are prepd. as PAF antagonists. Amidation of 2-(3-pyridyl)thiazolidine-4-carboxylic acid with 1-(3-phenylpropyl)piperazine using DCC in the presence of 1-hydroxybenzotriazole in DMF gave 60% (thiazolidinylcarbonyl)piperazine II, isolated as its trihydrochloride, which had an IC50 of 0.054 .mu.M in vitro for inhibition of PAF-induced rabbit platelet aggregation. Tablet formulation was given.

IT **118196-21-7P 131888-61-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as platelet-activating factor antagonist)

RN 118196-21-7 CAPLUS

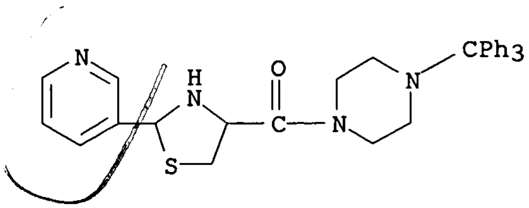
CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

RN 131888-61-4 CAPLUS

CN Piperazine, 1-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-4-(triphenylmethyl)- (9CI) (CA INDEX NAME)



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L6   ANSWER 32 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1991:429318  CAPLUS
DN   115:29318
TI   Preparation of pyrazole derivatives as angiotensin II antagonists
IN   Naka, Takehiko; Nishikawa, Kohei
PA   Takeda Chemical Industries, Ltd., Japan
SO   Eur. Pat. Appl., 33 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   EP 411507            A1    19910206   EP 1990-114493         19900727
     EP 411507            B1    19941026
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 03218371          A2    19910925   JP 1990-204437         19900731
     US 5183899           A     19930202   US 1990-560759         19900731
     CA 2022419           AA    19910203   CA 1990-2022419        19900801
PRAI JP 1989-200963       A     19890802
     JP 1989-235124       A     19890911
     JP 1989-293459       A     19891110
OS   MARPAT 115:29318
GI
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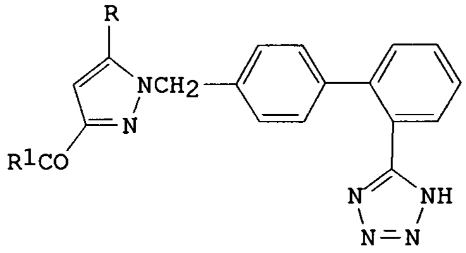

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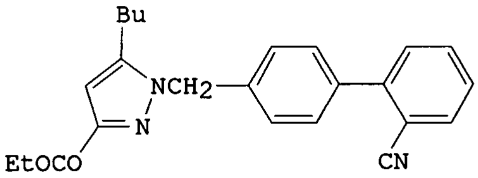

II

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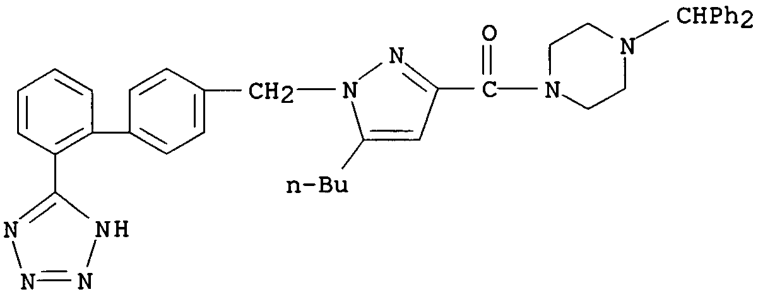
AB   Pyrazole derivs. [I; R = alkyl; R1 = OH, alkoxy, halo, (substituted)
     amino], useful as angiotensin II antagonists in treating such
     cardiovascular disorders as hypertension, heart disease, and cerebral
     stroke, are prepd.  Et 5-butylpyrazole-3-carboxylate and
     4-(2-NCC6H4)C6H4CH2Br were added to a mixt. of 60% NaH (oil) in hexane and
     THF with stirring at room temp. to give 86% benzylpyrazole derivs. II,
     which was heated with NaN3 and NH4Cl in DMF at 110-115.degree. to give 58%
     tetrazole deriv. I (R = Bu, R1 = EtO) (III).  III showed 75 and 92%
     inhibition of angiotensin II receptor binding at 1 .times. 10-6M and 1
     .times. 10-5M, resp.  Also prepd. and tested were 34 addnl. I.  Capsule,
     tablet, and injection formulations were given.
IT   134401-87-9P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
```

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as angiotensin II antagonist)

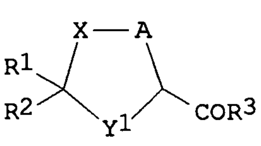
RN 134401-87-9 CAPLUS
CN Piperazine, 1-[[5-butyl-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1H-pyrazol-3-yl]carbonyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1991:81815 CAPLUS
DN 114:81815
TI Preparation of pyridylthiazolidine derivatives as platelet-activating factor (PAF) antagonists
IN Mase, Toshasu; Hara, Hiroshi; Nagaoka, Hitoshi; Suzuki, Takeshi; Takahashi, Takumi; Tomioka, Kenichi; Yamada, Toshimitsu
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02049726	A2	19900220	JP 1988-201555	19880811
	JP 06096532	B4	19941130		
PRAI	JP 1988-201555		19880811		

OS MARPAT 114:81815
GI



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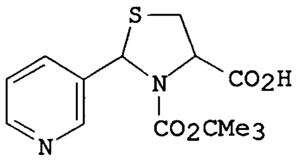
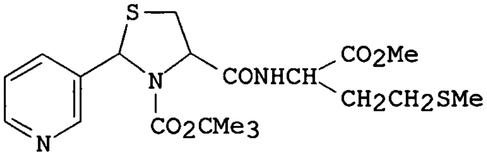


II



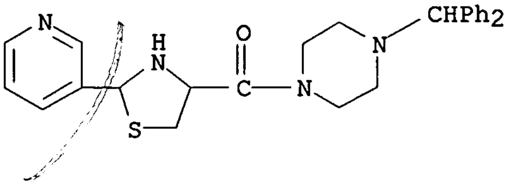
III

AB The title compds. [I; R1 = (benzo-fused) (substituted) 5- or 6-membered heterocycle; R2 = H, alkyl, R1; X = O, S, (alkyl-substituted) CH2; Y1 = O, S, NR4 wherein R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; R3 = (substituted) amino, hydrazino, etc.; A = (alkyl-substituted) CH2, CH2CH2] are prepd. L-Methionine Me ester-HCl 390, 1-hydroxybenzotriazole 390, N-methylmorpholine 190, and DCC 440 mg were added successively to a soln. of 600 mg carboxylic acid II in THF at <4.degree., and the mixt. was stirred at room temp. to give 440 mg amide III. Also prepd. were 172 addnl. I which showed platelet aggregation inhibition activity with IC50 of 0.024-0.097 .mu.M. Various formulations were also given.

IT **118196-21-7P 131888-61-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as platelet-activating factor antagonist)

RN 118196-21-7 CAPLUS

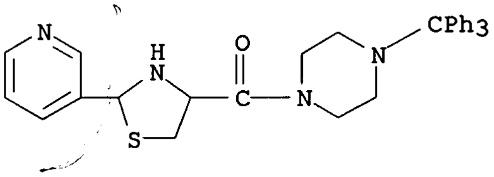
CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

RN 131888-61-4 CAPLUS

CN Piperazine, 1-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-4-(triphenylmethyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1989:23877 CAPLUS

DN 110:23877

TI Saturated heterocyclic carboxamides, especially thiazolidinecarboxamides, useful as PAF antagonists, their pharmaceutical compositions, and processes and intermediates for their preparation

IN Mase, Toshiyasu; Hara, Hiromu; Nagaoka, Hitoshi; Takahasi, Takumi; Suzuki, Takeshi; Tomioka, Kenichi; Yamada, Toshimitsu

PA Yamanouchi Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 162 pp.
CODEN: EPXXDW

DT Patent

LA English

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FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   EP 279681            A2    19880824   EP 1988-301397         19880219
     EP 279681            A3    19891115
         R:  AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     CN 1030415           A     19890118   CN 1988-100590         19880216
     FI 8800757           A     19880821   FI 1988-757            19880218
     FI 93113             B     19941115
     FI 93113             C     19950227
     DK 8800866           A     19880822   DK 1988-866            19880219
     NO 8800740           A     19880822   NO 1988-740            19880219
     ZA 8801182           A     19881026   ZA 1988-1182           19880219
     JP 02000179          A2    19900105   JP 1988-37224          19880219
     JP 06031230          B4    19940427
     HU 50335             A2    19900129   HU 1988-811            19880219
     AU 8812080           A1    19880825   AU 1988-12080          19880222
     AU 618726            B2    19920109
     AU 9214013           A1    19920625   AU 1992-14013          19920401
     AU 646156            B2    19940210
     JP 07002844          A2    19950106   JP 1993-205720         19930728
PRAI JP 1987-36950        A     19870220
     JP 1987-125259       A     19870521
     JP 1987-249499       A     19871001
     JP 1988-13928        A1    19880125
OS   MARPAT 110:23877
GI
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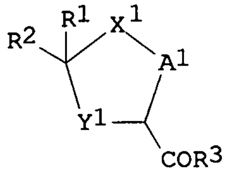
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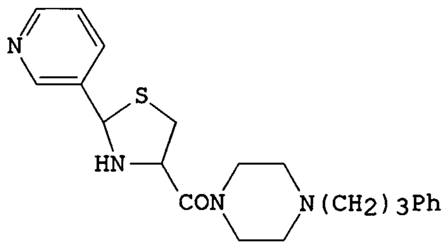


II

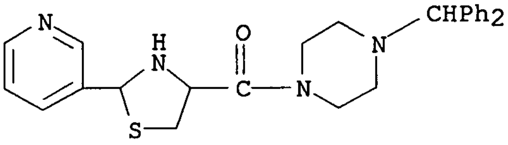
AB The title compds. [I; R1 = (un)substituted 5- or 6-membered hetero- or benzohterocyclyl; R2 = H, alkyl, R1; X1 = O, S, CH2, alkylidene; Y1 = O, S, NR4; R4 = H, alkyl, CO2H, acyl, alkoxycarbonyl; A1 = CH2, CH2CH2, optionally substituted by alkyl groups; R3 = NR5R6, NHNR8R9, NR10OR11; one of R5, R6 = H, (un)substituted hydrocarbyl; the other = (un)substituted hydrocarbyl, R1; R5R6 = A2ZR7A3, A2OA3; A2, A3 = (un)substituted alkylene; Z = CH, N; R7 = H, CO2H, acyl, alkoxycarbonyl, CONH2, mono- or dialkylcarbamoyl, (un)substituted hydrocarbyl; R8-R11 = H, alkyl, aralkyl, aryl] are prepd. as antagonists of platelet-activating factor (PAF). Amidation of 2-(3-pyridyl)thiazolidine-4-carboxylic acid with 1-(3-phenylpropyl)piperazine using DCC in the presence of 1-hydroxybenzotriazole in DMF gave 60% (thiazolidinylcarbonyl)piperazine II, isolated as its trihydrochloride. II.3HCl had an IC50 of 0.054 .mu.M in vitro for inhibition of PAF-induced rabbit platelet aggregation. Tablets were prepd. each contg. II fumarate 20, lactose 57, corn starch

33, hydroxypropylcellulose 4, and Mg stearate 1 mg.

IT **118196-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as inhibitor of platelet-activating factor)

RN 118196-21-7 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[[2-(3-pyridinyl)-4-thiazolidinyl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

L6 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1987:598361 CAPLUS

DN 107:198361

TI Pyroglutamide derivatives, procedure for their preparation, and their use as nootropics

IN Kimura, Kiyoshi; Chokai, Soichi; Tomita, Toshio; Kise, Masahiro; Nakamura, Kenichi

PA Nippon Shinyaku Co., Ltd., Japan

SO Ger. Offen., 29 pp.
CODEN: GWXXBX

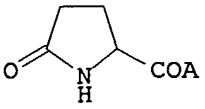
DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3701494	A1	19870723	DE 1987-3701494	19870120
	DE 3701494	C2	19910613		
	JP 62252761	A2	19871104	JP 1986-38024	19860221
	JP 04055405	B4	19920903		
	JP 62252762	A2	19871104	JP 1986-280453	19861125
	JP 2513197	B2	19960703		
	FR 2597100	A1	19871016	FR 1987-485	19870116
	FR 2597100	B1	19940819		
	SE 8700203	A	19870722	SE 1987-203	19870120
	SE 503436	C2	19960617		
	NL 8700119	A	19870817	NL 1987-119	19870120
	NL 192304	B	19970106		
	NL 192304	C	19970507		
	ES 2002083	A6	19880701	ES 1987-128	19870120
	CH 675418	A	19900928	CH 1987-195	19870120
	DE 3744947	C2	19920716	DE 1987-3744947	19870120
	CA 1323874	A1	19931102	CA 1987-527706	19870120
	GB 2185483	A1	19870722	GB 1987-1245	19870121
	GB 2185483	B2	19901024		
	BE 1003248	A5	19920211	BE 1987-36	19870121
	JP 63146857	A2	19880618	JP 1987-154238	19870619
	FR 2613366	A1	19881007	FR 1987-13376	19870928

FR 2613366 B1 19940819
US 5102882 A 19920407 US 1991-661523 19910226
PRAI JP 1986-11359 A 19860121
JP 1986-11360 A 19860121
JP 1986-175168 A 19860724
US 1987-5255 B1 19870120
US 1988-286652 B1 19881219
OS CASREACT 107:198361; MARPAT 107:198361
GI



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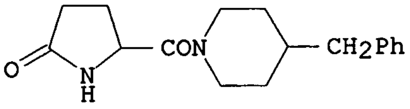


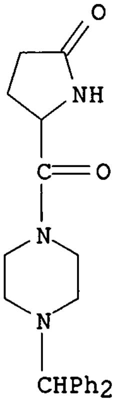
II

AB Pyroglutamide derivs. I (A = cyclic amino group) which a) in the ring, besides 1 N atom, there are more N atoms as hetero atoms or only 1 N atom as hetero atom whereby b) the unsubstituted pyrrolidino group and the unsubstituted piperidine group are excepted, and their salts, useful as nootropic agents and thus for the treatment of dementia including memory loss, were prepd. by 5 methods. Me pyroglutamate reacted with 4-benzylpiperidine in PhMe under reflux in 24 h to give II. The min. ED to restore memory loss in rats due to scopalamine, electroshock, or CO_2-induced memory loss was 10 mg/kg D-I (A = piperidine) orally, vs. 50 mg/kg for aniracetam. A formulation for injection comprised 5 wt.% DL-I (A = piperidine) in physiol. saline.

IT **110957-15-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as nootropic)

RN 110957-15-8 CAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(5-oxo-2-pyrrolidinyl)carbonyl]- (9CI) (CA INDEX NAME)



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L6 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1971:436445 CAPLUS

DN 75:36445

TI 4'-Nicotinoyl-d-lysergopiperazide

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IN    Stuetz, Peter
PA    Sandoz Ltd.
SO    Ger. Offen., 19 pp.
      CODEN: GWXXBX
DT    Patent
LA    German
FAN.CNT 1
      PATENT NO.          KIND    DATE        APPLICATION NO.         DATE
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PI    DE 2044163           A      19710311    DE 1970-2044163         19700905
      CH 523887            A      19720615    CH 1969-523887          19690910
      CH 523888            A      19720615    CH 1969-523888          19690910
      US 3752815           A      19730814    US 1970-69930           19700904
      NL 7013306           A      19710312    NL 1970-13306           19700909
      FR 2070681           A5     19710917    FR 1970-32700           19700909
PRAI  CH 1969-13651        A      19690910
      CH 1969-13652        A      19690910
GI    For diagram(s), see printed CA Issue.
AB    The saluretic, antiphlogistic, edema-inhibiting, and sedative title compd.
      (I) was prepd. Thus, 1-tritylpiperazine and nicotinoyl chloride (II) in
      pyridine gave 1-nicotinoyl-4-tritylpiperazine (III).  Treatment of III
      with HCl(g) in MeOH gave 1-nicotinoylpiperazine (IV).  ClCOCOCl in MeCN
      was added to DMF-MeCN at -10.degree., D-lysergic acid (V) added, and IV in
      pyridine added to give I.  V was added to 0.degree. to a suspension
      obtained from ClCOCOCl, MeCN, and DMF, piperazine added, the reaction
      mixt. kept 4 hr at 0.degree., and the product treated with II.HCl at room
      temp. to give I.
IT    32422-97-2P
      RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of)
RN    32422-97-2  CAPLUS
CN    Piperazine, 1-nicotinoyl-4-trityl- (8CI)  (CA INDEX NAME)
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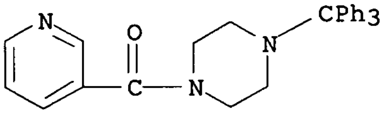

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L6    ANSWER 37 OF 37  CAPLUS  COPYRIGHT 2006 ACS on STN
AN    1967:55517  CAPLUS
DN    66:55517
TI    1-Arylideneamino-4-(4-benzhydryl-1-piperazinylcarbonyl)piperazines
IN    Cusic, John W.; Yonan, Peter
PA    G.D. Searle and Co.
SO    U.S., 2 pp.
      CODEN: USXXAM
DT    Patent
LA    English
FAN.CNT 1
      PATENT NO.          KIND    DATE        APPLICATION NO.         DATE
      ---------------     ----    --------    --------------------    --------
PI    US 3297689                  19670110    US 1965-423582          19650105
GI    For diagram(s), see printed CA Issue.
AB    1-Benzhydryl-4-(4-amino-1-piperazinylcarbonyl)piperazine (I), the
      intermediate to the title compds., is prepd. as follows: A soln. of 126
```
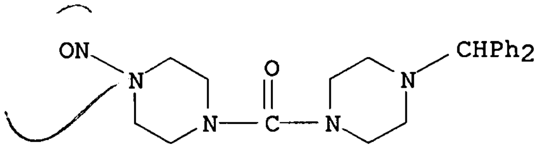

parts 1-benzhydrylpiperazine in 600 parts CHCl3 is added portionwise to a 0-5.degree. soln. of 80 parts COCl2 in 600 parts CHCl3, the mixt. stirred at 0-5.degree. 1.5 hrs., allowed to warm to room temp., dild. with 1125 parts CHCl3, and neutralized by cautious addn. of 150 parts K2CO3, the resultant mixt. filtered, and the filtrate treated conventionally to isolate 4-benzhydrylpiperazine-1-carbonyl chloride (II), m. 140-1.degree.. A mixt. of 20 parts II, 11 parts 1-nitrosopiperazine, 20 parts Et3N, and 225 parts CHCl3 is refluxed 18 hrs. on a steam bath and an addnl. 150 parts CHCl3 added to the mixt. which is then washed with several portions of H2O, dried, and evapd. to give 1-benzhydryl-4-(4-nitroso-1-piperazinylcarbonyl)-piperazine (III), m. 152-3.degree.. To a soln. of 27 parts III in 210 parts glacial HOAc is added 60 parts H2O, the mixt. heated to 45.degree., 35 parts Zn dust added over 30 min. while temp. is maintained at about 45.degree., the mixt. heated at about 50.degree. 1.5 hrs. and filtered while hot, and the filtrate dild. with 500 parts H2O, cooled in an ice bath, and made alk. by addn. of 250 parts NaOH in 250 parts H2O. Conventional isolation gives I. A soln. of 5 parts I, 2 parts piperonal, and 1 drop HOAc in 40 parts EtOH is heated on a steam bath about 5 min. and the resultant soln. cooled to sep. 1-piperonylideneamino-4-(4-benzhydryl-1-piperazinylcarbonyl)piperazine (IV), m. 170-1.degree.. Similarly, 4 parts I and 3 parts 4-hydroxybenzaldehyde in 40 parts EtOH heated on a steam bath 5 min. give 1-(4-hydroxybenzylideneamino)-4-(4-benzhydryl-1-piperazinylcarbinol)piperazine, m. 261-3.degree.. Compds. of type I are pharmacol. active, as anti-ulcer agents, antihypertensive agents, and inhibitors of hepatic synthesis of cholesterol.

IT **13521-98-7P 13521-99-8P 13522-26-4P**
14965-30-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 13521-98-7 CAPLUS

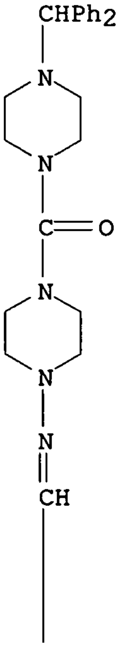
CN Piperazine, 4-(diphenylmethyl)-4'-nitroso-1,1'-carbonyldi- (8CI) (CA INDEX NAME)



RN 13521-99-8 CAPLUS

CN Piperazine, 4-(diphenylmethyl)-4'-[(p-hydroxybenzylidene)amino]-1,1'-carbonyldi- (8CI) (CA INDEX NAME)

PAGE 1-A



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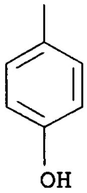
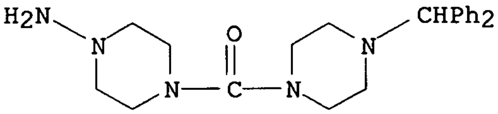


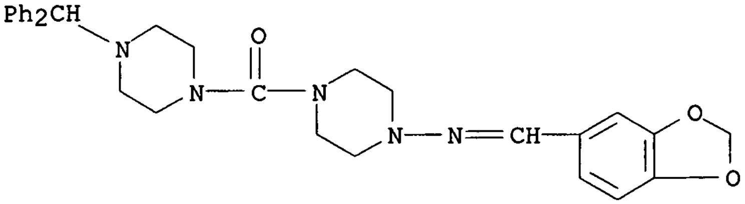
RN 13522-26-4 CAPLUS

CN Piperazine, 4-amino-4'-(diphenylmethyl)-1,1'-carbonyldi- (8CI) (CA INDEX NAME)



RN 14965-30-1 CAPLUS

CN Piperazine, 4-(diphenylmethyl)-4'-(piperonylideneamino)-1,1'-carbonyldi- (8CI) (CA INDEX NAME)



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